

# THE MODERN HOSPITAL

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## A BRIEF REVIEW OF HOSPITAL STANDARDIZATION IN 1919

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THE practice of medicine is in a fluid state. The profession of medicine with unprecedented speed is coming into its own. Comparable with the scientific advance which medicine has made in recent years, comes now an awakening on the part of the public as to the value of medicine. Further, thoughtful people, as never before, believe that they have a right to be well; and in seeking the means through which they may maintain this right, they turn naturally to the hospitals.

On the other hand, the hospitals,—that is, the superintendents, staffs, nurses, and trustees, are in dead earnest to do their parts with credit. Their combined effort is popularly known as hospital standardization. In this connection the following editorial paragraph recently appeared in THE MODERN HOSPITAL:

"The superintendent, the staff, and the trustees are willing and even eager to make their maximum effort for any patient in the hospital. That fact is true in almost every hospital on this continent. But do the superintendent, the staff, and the trustees coordinate their efforts so that every patient really gets the benefit of their combined energy and intelligence? It is just this question

*The Constitution of the United States, when it pledged us life, liberty and happiness, implied the right to health. The people of this country are beginning to pay more attention to the matter of health. The medical and allied professions, and the hospital folk, have been thinking together on the subject. The result has been action—a country-wide movement for the betterment of hospital service to patients. This cooperative effort is known as "Hospital Standardization." The name signifies a Minimum Standard; there is no desire to make one institution like another. Hospital Standardization is today a primary issue in the hospital world.*

which the American College of Surgeons asks. The College also answers the question by presenting its Minimum Standard for adoption. The 'Minimum Standard' penetrates through the complexities and reaches the heart of the matter. It is undebatable and is, probably, the most vital document which has come to hospitals in many years. Any hospital which does not meet that standard today has work to do."

The remarkable feature of the year's progress is the spirit with which the hospitals are active in the work of standardization. Hospitals want to know whether or not the patient receives proper care and treatment. A brief review of the work done during the past year follows:

### Progress in the Field

During 1919 the American College of Surgeons completed its survey of hospitals of 100 or more beds capacity in the United States and Canada. Besides the collection of data by questionnaire, members of the College staff visited these hospitals in order to make clear the requirements of the Minimum Standard. As a result of these visits it was found that on October 1, 1919, out

of a total of 671 hospitals in the United States and Canada, 198 met the Minimum Standard.

On October 24, 1919, the College made its report to Fellows of the College in connection with the Ninth meeting of the Clinical Congress of the College, in New York City, and presented the accompanying table (Table I). The headings of this table will be better understood by comparing them with the requirements outlined in the Minimum Standard which follows later in the text.

In addition to its other activities, the College arranged a number of hospital conferences throughout the western half of the United States and Canada. The conferences were designed to supplement the work of the hospital visitors and included special meetings of the County Medical Societies, Chambers of Commerce, Business Men's Associations, and Canadian Clubs.

During the year bulletins, Volume IV, Nos. 1 and 2, were published. These bulletins contained a detailed explanation of the Minimum Standard with special reference to the meaning and use of case records and forms suggested for the keeping of case records in a simple, convenient, and adequate manner, respectively. Some 54,000 of these publications were distributed.

The following is a statement of the Minimum Standard:

"(1) That physicians and surgeons privileged to practice in the hospital be organized as a definite group or staff. Such organization has nothing to do with the question as to whether the hospital is 'open' or 'closed,' nor need it affect the various existing types of staff organization. The word 'staff' is here defined as the group of doctors who practice in the hospital, inclusive of

all groups such as the 'regular staff,' the 'visiting staff,' and the 'associate staff.'

"(2) That membership upon the staff be restricted to physicians and surgeons who are (a) competent in their respective fields, and (b) worthy in character and in matters of professional ethics; that in this latter connection the practice of the division of fees, under any guise whatever, be prohibited.

"(3) That the staff initiate and, with the approval of the governing board of the hospital, adopt rules, regulations, and policies governing the professional work of the hospital; that these rules, regulations, and policies specifically provide:

"(a) That staff meetings be held at least once each month. (In large hospitals the departments may choose to meet separately.)

"(b) That the staff review and analyze at regular intervals the clinical experience of the staff in the various departments of the hospital, such as medicine, surgery, and obstetrics; the clinical records of patients, free and pay, to be the basis for such review and analyses.

"(4) That accurate and complete case records be written for all patients and filed in an accessible manner in the hospital, a complete case record being one, except in an emergency, which includes the personal history; the physical examination, with clinical, pathological, and x-ray findings when indicated; the working diagnosis; the treatment, medical and surgical; the medical progress; the condition on discharge with final diagnosis; and, in case of death, the autopsy findings when available.

"(5) That clinical laboratory facilities be avail-

TABLE I—AS MEASURED BY MINIMUM STANDARD—STAFF MEETINGS, CASE RECORDS, AND CLINICAL LABORATORIES IN GENERAL HOSPITALS OF 100 OR MORE BEDS

1. IN UNITED STATES

Groups by No. of beds	No. hospitals in each group	Staff meetings each month	Personal history	Phys. Exam.	Working Diag.	Lab. Findings	Treatment or Operation	Progress Note	Clinical Laboratories			No. hospitals meeting Min. Stand.
									Final Diag.	Path.	X-Ray	
100-149	282	91	131	117	112	181	178	112	194	170	174	66
150-199	133	49	67	56	54	95	93	56	97	96	95	37
200-249	65	27	30	31	27	40	40	27	40	40	40	22
250-299	57	33	32	31	28	42	41	28	44	44	42	24
300-349	24	13	13	12	12	18	18	14	20	21	20	8
350-399	11	6	6	6	5	6	6	5	6	6	6	3
400 or more	45	34	39	39	35	41	41	37	41	41	41	30
Totals	617	253	318	292	273	423	417	279	442	418	418	190

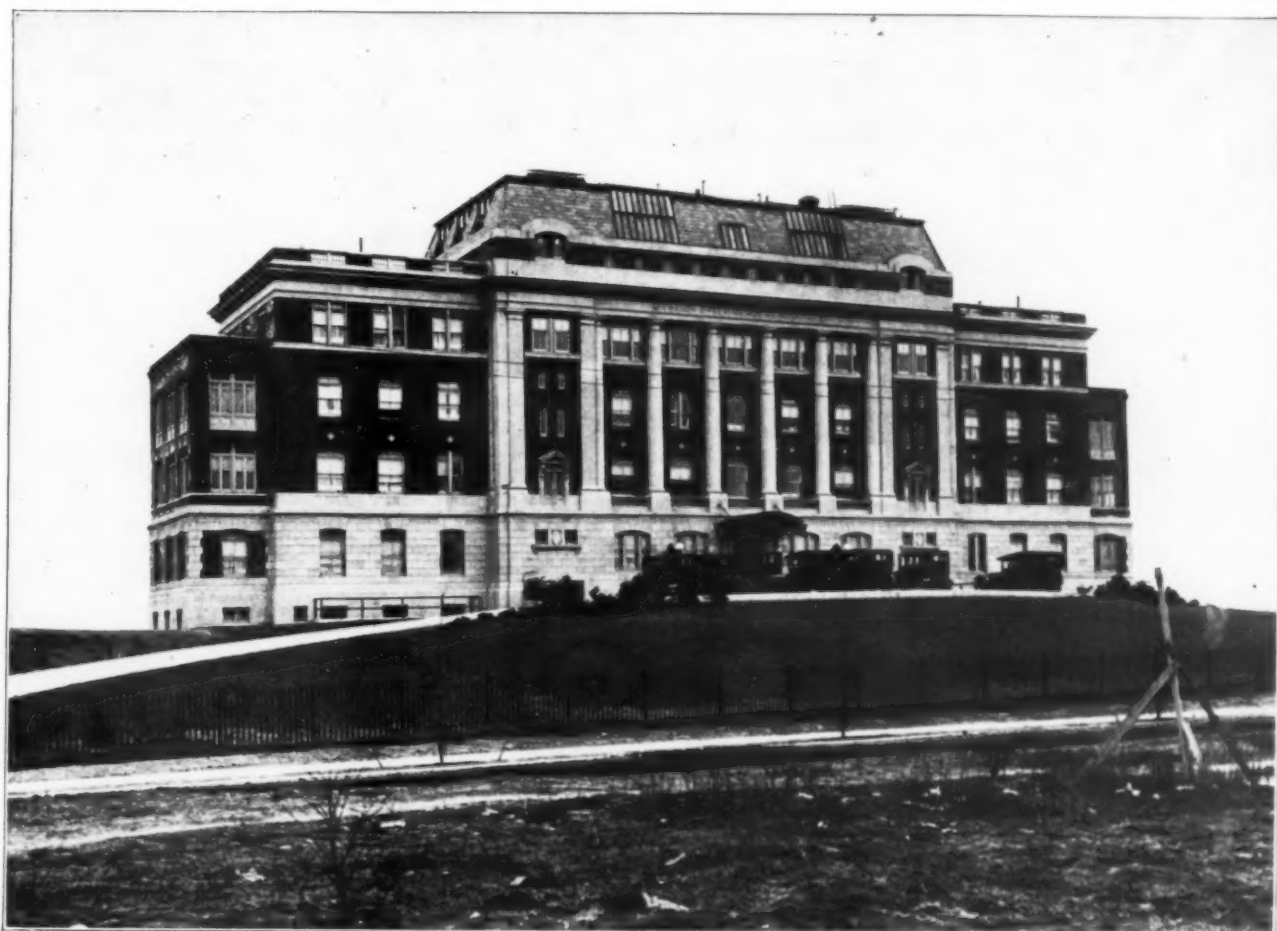
2. IN DOMINION OF CANADA

Groups by No. of beds	No. hospitals in each group	Staff meetings each month	Personal history	Phys. Exam.	Working Diag.	Lab. Findings	Treatment or Operation	Progress Note	Final Diag.	Path.	X-Ray	No. hospitals meeting Min. Stand.
100-149	26	3	4	7	4	6	6	5	7	8	8	2
150-199	7	1	2	2	1	2	2	0	2	3	3	0
200-249	6	1	2	2	2	2	3	2	5	3	3	1
250-299	3	1	2	2	1	3	3	1	3	3	3	1
300-349	2	1	0	1	0	1	1	0	1	1	1	0
350-399	5	1	2	2	1	2	2	1	2	2	2	1
400 or more	5	3	3	3	3	4	4	3	4	4	4	3
Totals	54	11	15	19	12	20	21	12	24	24	24	8

able for the study, diagnosis, and treatment of patients, these facilities to include at least chemical, bacteriological, serological, histological, radiographic, and fluoroscopic service in charge of trained technicians."

In consideration of the success of its work among the larger institutions, the Regents of the College decided to extend its program of hospital

It was found that 5,342 hospitals, or 82.6 per cent, did not use interns; and that 1,126 hospitals, or 17.4 per cent, were using or desired to have interns. This latter figure, however, included the larger institutions and is comprised of 34.5 per cent of the total bed capacity. Of the 1,126 hospitals using interns, 801, in replies to specific questions, furnished the following figures: Eighty



In its architectural conception the Carson Peck Memorial Hospital, Brooklyn, N. Y., is one of the outstanding hospitals of 1919. Its bed capacity provides for eighty adult patients and twenty children. Construction was begun in 1917 and completed late in 1918. The hospital has been in operation since the beginning of 1919. Ludlow & Peabody, New York City, architects.

standardization so it will be made to include general hospitals with capacities of fifty or more beds.

#### American Medical Association

In the American Medical Association the matter of hospital standardization is in charge of the Council on Medical Education. In the report of the Council, made on June 9, 1919, an exhaustive report was made of the survey of hospitals in the United States which had been made by the Council during the preceding year. This report showed that in October, 1918, there were in the United States 6,440 hospitals having ten or more beds, or a total capacity of 758,442 beds.

per cent are general hospitals; 72.8 per cent have expert anesthetists; 67.5 per cent have expert dietitians; 76 per cent have fully equipped x-ray laboratories; 20.8 per cent are equipped with electro-cardiographic apparatus.

The tabulations disclosed the interesting fact that from 88 per cent to 92 per cent of hospitals having interns keep records; that 72.8 per cent keep records of autopsy findings; that 69.1 per cent keep a special record showing final results; and that 57.8 per cent keep indexes of their patients by name and by diagnoses. These indexes extend over varying periods.

Sixty-one and nine-tenths per cent of the hospitals having interns obtain current medical periodicals and 46.3 per cent are supplied with

medical texts and reference books. It is pointed out that since only 17.4 per cent of all hospitals seek or make use of interns, the large majority would not be included in an investigation from the standpoint of an intern's training.

The Council presented a tentative schedule of essentials in a hospital for the satisfactory training of interns as follows:

#### I.—The Staff of the Hospital

- (1) There must be an organized staff.
- (2) Staff physicians should be men of unquestionable integrity both professionally and morally.
- (3) They should be proficient in the special fields in which they work in the hospital.
- (4) They should give personal attention to the patient under their charge, some member of each department visiting the hospital every day, and every member of the staff should visit the hospital at least once each week.
- (5) They should assume an obligation to direct and supervise the training of the interns admitted to the staff.
- (6) (a) A clinical conference of the attending staff and the interns should be organized and held at frequent intervals, at least monthly, at which new cases and the problems they present should be discussed. (b) There should also be clinical and pathologic conferences, for

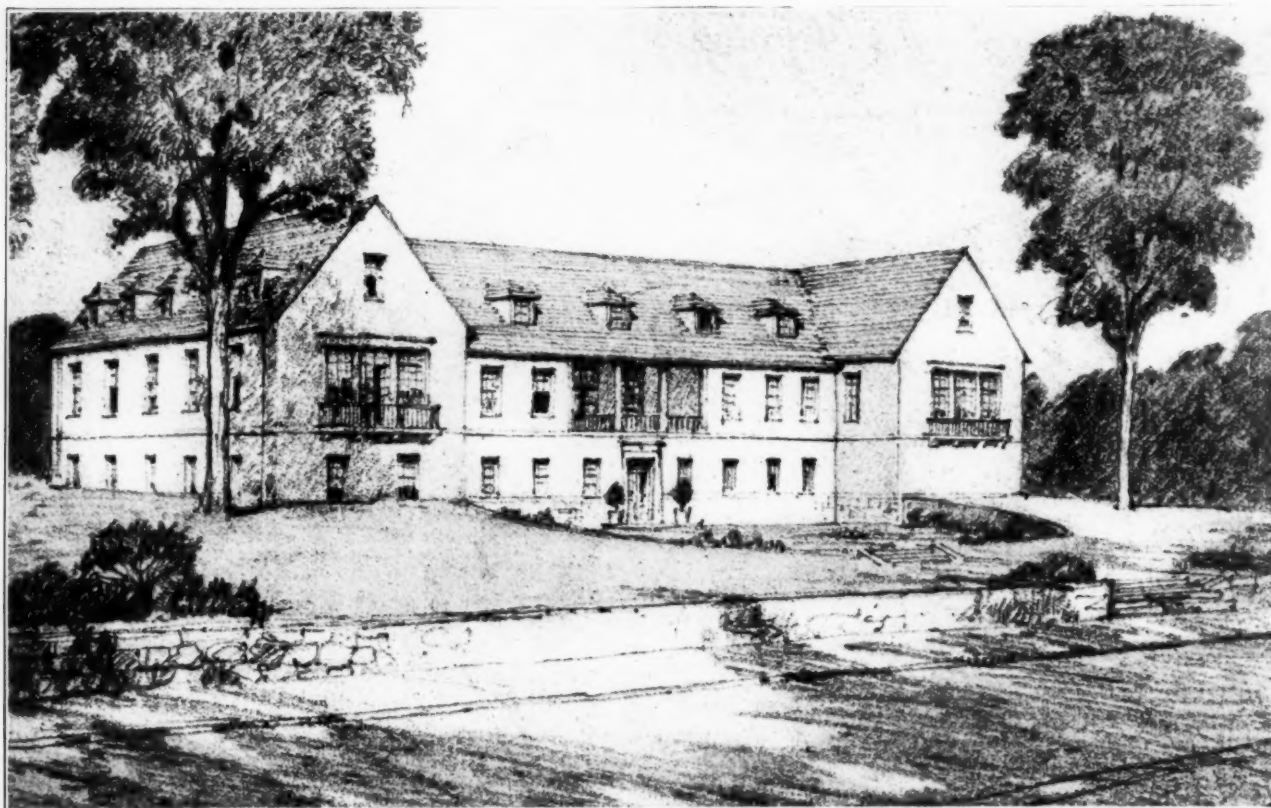
the clinical point of view and on which they have read up the available literature.

#### II.—Equipment of the Hospital

- (1) A pathologic department equipped with facilities for necropsies, this work to be in charge of an expert, who may be a member of the staff skilled in such work.
- (2) One or more small clinical laboratories for work by the interns in direct connection with the wards for the routine examination of blood, urine, stools, and gastric contents. Within the hospital there should be also a clinical laboratory in charge of an expert who shall be responsible for the more technical, chemical, bacteriologic, and serologic work, and examinations.
- (3) A Roentgen-ray department in charge of an expert roentgenologist and equipped to do roentgenographic, fluoroscopic, and therapeutic work.
- (4) A working medical library containing a fair supply of modern standard text and reference books, the better medical journals, and suitable charts and models. Bound volumes of the better medical journals for recent years constitute a very satisfactory part of a hospital medical library.
- (5) Adequate provision for the housing and recreation of interns.

#### III.—Histories and Records

- (1) Complete histories should be taken, giving the pa-



A noteworthy institution among those constructed in 1919 is the New Jersey Orthopedic Hospital, which is being completed for occupancy in 1920, thus terminating a long delay in the erection of the building. The delay was encountered as a consequence of the war, during the period when materials and labor were not obtainable. York & Sawyer, New York City, architects.

the attending staff and interns where the antemortem clinical picture is presented and compared with the necropsy findings. (c) There are also hospital medical societies at which staff members and interns are encouraged to present cases which have been worked up from

tient's complaint, physical examination at time of admission to hospital, laboratory findings, description of operation, if any, daily record of case, condition and date when discharged from the hospital, end-results, and, in case of death, necropsy findings if necropsy is performed.

(2) Histories should show, by signatures or initials, the persons writing them or parts of them. This will show not only the work of the intern, but also the supervision over it by members of the attending staff. In hospitals where senior medical students act as clinical clerks, it should be the duty of the interns to supervise and correct the students' histories and records.

(3) The records should be carefully kept and placed in charge of a trained historian. This will not only guarantee better records and better care from the patient's

(5) *Roentgen-Ray Work*:—The intern should receive a reasonable amount of instruction in the therapeutics of the roentgen-ray and also in the interpretation of roentgen-ray plates and fluoroscopic findings by an expert roentgenologist or a qualified member of the hospital staff.

(6) *Anesthetics*:—The intern should obtain experience in the administering of various kinds of anesthetics under expert supervision.

(7) *Dietetics*:—The intern should be given instruction by a trained dietitian, or qualified staff member, in the



This new institution, the University Hospital, at Oklahoma City, Okla., affords an additional 200 hospital beds in its community. It is a general hospital and was opened in 1919. The cost exceeded \$200,000. Jewell Hicks, Oklahoma City, Okla., architect.

point of view, but also will actually protect the hospital itself, especially in certain medical legal cases.

(4) The records should include an alphabetical index of the patients, another arranged by diagnoses, and, for surgical cases, one arranged from the standpoint of the regional part involved. For the alphabetical index, cards might be used, which should show the end-results, sometimes referred to as the "summary" of the case.

#### IV.—The Work of the Intern

(1) The hospital should have a set of printed rules and regulations defining the rights, duties, and privileges of the interns, which should be furnished to each intern or posted in a conspicuous place.

(2) All of the work of the interns should be under the careful supervision of staff physicians. This is essential, not only to correct errors—such as may be expected from their lack of experience—and thereby protect the patient, but also that the intern may receive instruction through his errors and be able to avoid their repetition.

(3) The writing of histories in connection with the examinations of patients. (See III, 2, above.)

(4) *Clinical Laboratory Work*:—This work might well be divided into two portions, the first to be obtained in the ward laboratory work in connection with the examination and care of patients, the other portion to be obtained in the general laboratory in assisting the expert pathologist in the more technical, chemical, bacteriologic, and serologic work. (See II, 2.)

feeding of both infants and adults as required in various diseases or conditions.

(8) *Maternity Work*:—Before finishing his intern service, the intern should have had experience under supervision not only in the delivery of normal maternity patients but also in the more common abnormal cases.

(9) *Necropsies*:—The intern should obtain an experience in making necropsies either under the direction of or by assisting the hospital pathologist.

(10) In his progress through his junior and senior service, the intern should assume, under careful supervision, an increasing responsibility in the diagnoses, daily observation, care and treatment of the patients under his service. This experience and responsibility should be in connection with as large a variety of cases as possible, and include at least such cases as are commonly met with by the average practitioner of medicine.

(11) The intern should obtain a practical experience in the applying of surgical dressings in connection with the care and treatment of patients. As he progresses in his surgical intern service he should be authorized, under careful supervision, to perform not only minor surgical operations, but also some of the more common major operations. In major operations, the attending surgeon should stand by, or assist the intern. Experience in connection with accident service is, likewise, highly desirable.

(12) The number of patients assigned to each intern and the routine work required of him should not demand more than eight (at most, ten) hours daily. He must

have ample time to study and read up on his cases, both in the interest of his patients and for his own educational progress.

(13) The intern service should extend through at least twelve months, and may to great advantage be continued through eighteen months or two years.

#### V.—Miscellaneous

(1) Prominent educators are about equally divided in favoring the rotating and non-rotating services for interns. It is evident, however, that each may represent an extreme which should be avoided. If the intern's work is limited to either medical or surgical services, the intern should be encouraged to remain an additional year, so as to complete both services. Special hospitals, such as those for diseases of the eye, ear, nose, and throat, should preferably select their interns from those who have already completed a service in a general hospital.

(2) When the internship is being taken as a prerequisite to graduation, the evaluation and grading of his hospital work should be done by the medical school from which he is to secure his M.D. degree, either by direct conference with his resident superior, or indirectly, through a series of reports furnished for this purpose by the hospital.

(3) The hospital should have an average of not less than twenty-five patients to be eligible to train an intern. To provide for a rotating service in laboratory, medicine, and surgery, therefore, a hospital should have at least seventy-five beds and three interns.

(4) In hospitals having four or more interns, they should preferably begin their work at different times and pass through junior and senior service. The services are sometimes further subdivided into first and second junior and first and second senior service. Such an arrangement keeps in the hospital a constant supply of experienced interns. This is not only to the interest of the patient, but also enables senior interns to instruct juniors.

(5) In hospitals having 100 beds or more, in addition to the interns, there should be a full-time resident physician, who has had at least one year's intern experience. It shall be his duty to supervise the work of the interns, particularly at times when no staff physicians are in attendance at the hospital. Even hospitals having less than 100 beds (public ward patients) will furnish their interns with a more valuable training if a resident physician is employed to superintend the professional work in the hospital.

#### VI.—Object

It is believed that an internship obtained under the provisions herein made will prove to be for the best interests not only of the intern and of the hospital, but also of the patients and of the public at large.

#### Catholic Hospital Association

During 1919 the Catholic Hospital Association has been active in fostering the principles of hospital standardization among its members. At the formation of the conference on hospital service, the attitude of the Catholic Hospital Association was defined as follows:

"The principle of the Catholic Hospital Association in the problem of so-termed hospital standardization is evolved from the fundamental

rights of the individual. Briefly stated, our principle is as follows: Once the hospital assumes the responsibility of the patient's care, the patient has the right to the most scientific and skillful service that is available. On this principle the Catholic Hospital Association was founded, by it we have been constantly guided, and on it we must ever firmly stand.

"In other words, we hold that adequate service to the patient is an obligation strictly imposed upon every hospital. Obviously the fundamental essential for meeting this obligation is such organization as is consistent with the work. Hence the organization of the hospital must be based and developed upon the requirements involved in the successful diagnosis and treatment of the patient, these requirements being viewed in the light of progress in the medical sciences.

"Necessarily, therefore, this principle postulates, first, diagnostic and therapeutic departments that are ample in number and adequately equipped; secondly, staffs whose personnel is ethical, scientific, and skillful, all harmoniously co-operating for the best interests of the patient, the hospital itself, the community, and for medical work in general.

"Among the various factors that we are constantly emphasizing for the attainment of this end are the following:

"(1) A thoroughly organized department of records. We hold that this department is fundamental; that without it an efficient and progressive hospital is not possible. Further, we maintain that, for the department of records to be able to render fullest service, there must be fixed periodic meetings of the staff, with attendance compulsory, at which records and conditions are frankly discussed, and means for betterment suggested. A follow-up system should be included as an essential part of this department.

"(2) Postmortem examinations. We hold that such examinations, together with the follow-up system of records, are necessary both for learning the truth with regard to results and for adequate progress in the hospital's work and in medical practice in general.

"In the work of standardizing hospitals we firmly believe in the principle of construction before classification. That is, viewed in the light of conditions, we hold that the present work should consist of educating, encouraging, and aiding hospitals. The reason for this principle is that many hospitals, particularly hospitals conducted by Sisters, have been, and are for the most part now, laboring at a disadvantage. Together with narrowly limited finances, Sisters' hospitals have commonly lacked the advantage of proper

guidance and cooperation on the part of their staffs.

"In many instances Sisters' hospitals have been the victims of incompetent staffs, staffs whose dominating factors have been selfishness, jealousy, and individual endeavors for control. Doctors have thought more of their own professional advancement and financial emolument than of the hospital's interests. Under such conditions effectual organization, with resultant suitable standards, has not been possible.

"To educate, encourage and aid; to eradicate such defects and evils, which are so omnipresent, is the purpose of our Association, a purpose in which we are firmly resolved to persist.

"As a practical contribution to hospital organization we have begun the development of summer schools for laboratory technicians, in order that Sisters and other women may be available to help supply the demand in this regard.

"To briefly summarize, all the work of the Catholic Hospital Association is done in view of the best interests of the patient. We hold that this is the logical foundation on which to build, and on which the adequate betterment of every phase of the hospital's function should be developed. We are convinced that, as a matter of justice, hospitals should be first shown the way and given ample time to meet requirements before they are publicly classified. As far as Sisters' hospitals are concerned, this conviction is based upon the common knowledge of the disadvantages under which many of their hospitals have been and are still laboring, also upon investigations and correspondence in which we are assured that the hospital Sisters are most eager to cooperate and to do all within their power to attain the scientific standard that is desired.

"In conclusion, any organization that stands for the principle by which the Catholic Hospital Association is guided, may be assured of our sincere cooperation in working for the betterment of hospital service, a problem whose solution is obviously basic for the well-being of suffering mankind."

Following out the principles thus outlined, the Right Reverend Charles B. Moulinier, president of the Association, pledged the support of the Association at the meeting on standardization at the Clinical Congress held in New York, October 24, 1919, as follows:

"I am just going to say in closing, I pledge to you with my personal honor and all the official capacity I have, I pledge to the American College of Surgeons,—that the Catholic Hospital Association, with whatever force and power it has, the hierarchy of the Catholic Church, the clergy

of the Catholic Church, and that great body of twenty or thirty thousand Sisters working in Catholic hospitals are going to cooperate with you fully, to the highest point ultimately. Just be patient a little here or there and you will be satisfied, not to say delighted, with the kind of cooperation you will get from the Sisterhoods, from all this Catholic body."

### State Boards of Examination

The various state and county medical societies and boards of licensure, especially those of Pennsylvania and New Jersey, have taken active and purposeful interest in standardization. In Pennsylvania the work of Dr. John M. Baldy in the field of hospital improvement is a notable achievement. Largely as a result of his efforts, the Bureau of Medical Education and Licensure of Pennsylvania now requires as preliminary to a medical license, an internship of one year's duration. Further, in order to insure the proper facilities for intern training, the Board has examined the various hospitals in the state and grouped them into three general classes known as "A," "B," and "Special Hospitals."

To be listed as a class "A" institution, a hospital must show satisfactory evidence of complying reasonably well with the following requirements, having:

(a) A staff whose members are giving efficient clinical and laboratory instruction to the interns.

(b) A system of record keeping in all departments efficiently conducted.

(c) An x-ray department adequately equipped, officered, and managed.

(d) Pathological and clinical laboratories which are adequately equipped, officered, and managed.

(e) An anesthetic department properly established and maintained.

(f) An obstetrical department with ample facilities for instruction under supervision.

(g) All other departments that are essential to a complete medical training.

The class "B" institutions are those which have been found to possess sufficient clinical facilities and the possibility of furnishing an adequate internship to meet the requirements of law, but which have not as yet attained the high degree of excellence that should characterize class "A" hospitals.

The "Special Hospitals" are those which are capable of giving a competent and valuable training in certain lines which they cover. In view of their limited field, such hospitals cannot give such a well-rounded training as is contemplated by

law. The service of these hospitals is available and valuable to those who have already completed their general internship, as well as to those who have received appointments in general hospitals and who are waiting their turn to enter upon such general service.

A credit of these months on the general intern service is allowed for training in such hospitals, provided this service be not less than three months in time.



One of the attractive hospitals of the year is the Englewood Isolation Hospital, at Bridgeport, Conn. It is a contagious disease hospital, with a bed capacity of 75. Cross & Cross, New York City, architects.

The State Board of Medical Examiners of New Jersey in 1914 appointed a committee on standardization and are following a program similar to that previously inaugurated in the state of Pennsylvania.

### Progress in Canada

In Canada, in spite of the inroads on hospital personnel made by the war, standardization is a live subject. At the meeting of the convention of the Hospitals of British Columbia, July 11, 1919, a committee on standardization was formed as outlined in the following resolution:

"That a committee on standardization, of nine members, be appointed, with the secretary of the Provincial Board of Health as honorary convener and the president of the Association as member, *ex-officio*.

"That the committee consist of three sub-committees: (1) business, (2) medical, and (3) nursing.

"That they be instructed to gather all data possible on the work of standardization now being carried on throughout the continent.

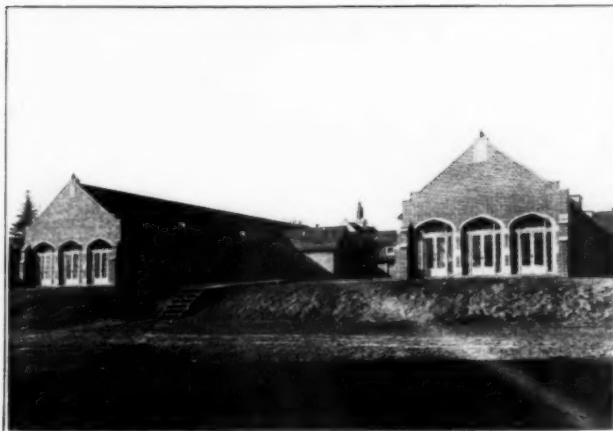
"That the committee keep the hospitals of the province fully posted as to advances made and suggested.

"That the committee advise by letter, or by official visits at no cost to the hospital, the consideration of such changes in the management of the particular hospital as will ensure the adop-

tion of measures that will place the different institutions in accord with the general principles being recommended by the International Hospital Association."

### American Conference on Hospital Service

The organization of this conference took place at the instance of the American Medical Association in Cincinnati on September 11, 1919. The constitution of the body states that, "It shall be composed of two duly accredited delegates hereinafter called delegates, from each of the following named organizations: American Association of Industrial Physicians and Surgeons, American Association of Hospital Social Service Workers, American College of Surgeons, American Hospital Association, American Medical Association, American Nurses' Association, Association of American Medical Colleges, Catholic Hospital As-



The new Children's Hospital of the University of Iowa, at Iowa City, has had an unique and interesting beginning. It forms a unit in the system of the University medical extension and research work. The illustration pictures the new building recently opened to accommodate the pediatric and orthopedic cases of children under sixteen years of age, for whom treatment is provided by the state under the statute known as the Perkins law. More than three thousand such cases have been handled under this law, and so urgent was the need of a special hospital that the state found it necessary to take these cases out of the other state hospitals. Thus came about the establishment of the Children's Hospital. The new building has a bed capacity of 150. Proudfoot, Bird & Rawson, Des Moines, Ia., architects.

sociation of the United States and Canada, Federation of State Medical Board of the United States, International Compensation Board, Medical Department of the United States Army, Medical Department of the United States Navy, National League of Nursing Education, National Organization for Public Health Nursing, and the United States Public Health Service, and of two representatives of any other organization that may hereinafter be elected by a two-thirds vote of the whole number of delegates, which shall be recorded by means of signed ballots."

The object of the organization as stated "shall be the betterment of hospital service in the United States of America and the Dominion of Canada."

The activities of this Conference are for the present limited to four different phases of the hospital problem, namely, the Intern Problem, the Nursing Problem, Standardization of Hospital Service, and the Medical Aspects of Social Insurance.

Certain organizations, because of their known interests, resources, and previous accomplishments, were invited to nominate the chairmen of the various committees. Therefore, a representative of the American Medical Association will act as chairman of the committee on the Intern Problem; of the American College of Surgeons, as chairman of the committee on the Standardization of Hospital Service; of the American Nurses' Association, as chairman of the committee on Nursing; and of the American Association of Industrial Physicians and Surgeons, as chairman of the committee on the Medical Aspects of Social Insurance. Any organization especially interested in any one of these particular subjects will be entitled to membership on the committee having that subject in hand, and it is the desire of the conference that such members of the conference as are interested in the work of any particular committee will become members of that committee.

#### American Protestant Hospital Association

During 1919 still another hospital organization was added to the number already in the field. On September 9, 1919, at Cincinnati, the American Protestant Hospital Association was formed. This Association voted to cooperate in the survey, which is now being made, under the auspices of the Interchurch World Federation, of Protestant Homes, of hospitals, and institutions for chil-

dren, the infirm, and aged in the United States and possessions. This survey is meant to show and tabulate the facilities and needs of these institutions, with a view to the development of future higher standards of service, and scientific advancement.

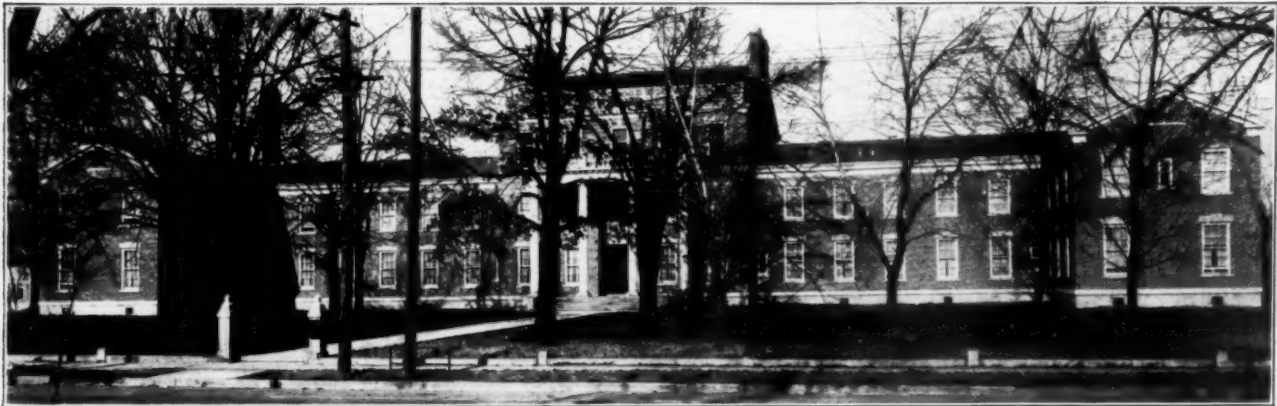
#### Literature

Some of the most fruitful work in molding public opinion and in furnishing leadership of thought on the subject of hospital standardization has been done by individuals. The writings of Dr. E. A. Codman and Dr. John A. Hornsby, of Dr. Robert L. Dickinson, Dr. John M. Baldy, Frank E. Chapman, and others, have furnished a stimulus of thought and action that is country-wide in scope.

A new conception of the hospital, a realization of its relation to the community, is taking shape in the public mind. Dr. George Gray Ward, in the report of the scientific work of the surgical staff at the Woman's Hospital in New York, has written: "Undoubtedly the community is awakening to the fact that, having passed through the antiseptic and the sanitary era, we are now on the threshold of the hospital era. The public is becoming educated rapidly to the advantages and necessity of modern diagnostic methods and to the fact that these can be obtained only in a hospital that is systematically organized to do proper diagnostic work. As a result of this knowledge, there will be a great increase in the number of people who will enter hospitals in the near future because they will appreciate that their cases will receive more thorough, systematic, and scientific study, with more perfect results and less expense, than if they remained at home. At present, in



The Ishpeming Hospital, Ishpeming, Mich., was opened in 1919 by the Cleveland-Cliffs Iron Company for the use of its employees. It has a capacity of sixty beds. Meyer J. Sturm, Chicago, architect.



This new building which the Illinois Central Railway Company erected at Paducah, Ky., to replace the one destroyed by fire, is fully up to the standard of hospitals which that corporation maintains along its lines for its employees. It has a capacity of ninety beds; outside patients as well as employees are accepted. Construction work started in the fall of 1918, and was completed in 1919. Richard E. Schmidt, Garden & Martin, Chicago, architects.

an urban community about 12 per cent of the sick, requiring professional care, enter hospitals.

"The board of governors, or trustees, of a hospital are primarily responsible for the kind of care and treatment that the patient receives, and they should not lose sight of the fact that the hospital which most successfully fulfills its functions is the one which is conducted with the primary ideal of procuring for the patient the best professional care, and not from the business standpoint of financial surplus. Hospital governors, as a rule, do not give the same intensive study to their hospital problems as they do to their individual business. They are interested principally in the balance sheet and do not concern themselves as to whether the results of the treatment the patients receive are what they should be.

"Because a hospital has large, elaborate buildings, with beautiful surroundings and socially prominent trustees, it does not follow that the patients of that hospital receive the skillful treatment which they have a right to expect. As has been well said, many such elaborate institutions are mere boarding houses or hotels for the sick. We all know that a small hospital, situated in the country, may give the highest type of scientific service to its patients. As Hornsby well says, 'the product of the hospital is health,' and also, 'No hospital can be better than its medical staff.' We know that it is the character of the medical staff that determines the product of the hospital, and the governors or trustees determine the type of the medical staff.

"A man who accepts a position on the governing board of a hospital should realize that he accepts a public trust and that hospital trustees stand in the same relation to a hospital as trustees do to a trust fund. Therefore, they should demand and see that they get efficient results for the money they expend. Their responsibility can only be fulfilled when they have provided a con-

scientious, efficient medical staff, and a competent, tactful superintendent.

"It is the duty of the profession to educate the trustees as to their responsibilities, and when we can show them that efficiency in the hospital, just as efficiency in the factory, is an economic problem, they will become interested. Bancroft's statement that 'every cured and satisfied patient leaving the hospital is an asset and every unimproved or dissatisfied patient is a liability' is just as true in the medical world as its counterpart is in the business world."

The medical press has been almost a unit in furthering the work of hospital standardization. In this connection, the energy of THE MODERN HOSPITAL in keeping before the country the progress and distinguished success of any institution in the field of standardization has been of more benefit than can easily be estimated. If a prognosis may be made, based on the universal interest in the problem of hospital standardization, the institution of the future will be one which will fully justify the present efforts.

#### HOSPITALIZATION FOR VETERANS

Surgeon General Blue of the Public Health Service in the appropriation asked from Congress to build and equip hospitals to care for war risk insurance patients reports that more than 30,000 beds should be available by July 1, 1921. This estimate of the hospital facilities needed takes into account the treatment of selective service men passed by the local boards and later rejected at camps.

#### CALIFORNIA JOURNAL INSTALLS SECTION ON HOSPITAL SERVICE

Recognizing the importance of thoroughly equipped hospitals in relation to the development of medicine, the *California State Journal of Medicine* this year has installed a new section devoted to hospital service. Since inadequate hospital facilities often prove a serious handicap to physicians and surgeons of many communities, the Journal feels that these practical hospital hints will be appreciated by its readers.

## HOSPITAL CONSTRUCTION IN 1919

By RICHARD E. SCHMIDT, RICHARD E. SCHMIDT, GARDEN AND MARTIN, ARCHITECTS, CHICAGO

**I**N spite of the fact that we were at war in 1918 and subject to the limitations placed on construction of new buildings by the War Industries Board, a considerable number of hospitals were under construction and others had accepted our advice to have building plans completed and in readiness to begin building as soon as the restrictions were removed, so that the number of hospitals which opened their doors in 1919 does not appear to have been much below the average of former years. Hospitals which were prepared to let contracts immediately after the armistice was signed, forestalled a great increase in the cost of their buildings. This increased cost is now dampening the desire of many hospital boards to construct new hospitals or to increase their existing accommodations.

Available statistics enumerate 129 hospitals in the United States and Canada which opened their doors for patients during 1919. These aggregate 5,721 beds, or an average of about 44 beds in each. One has as few as six beds, the largest general hospital, 326 beds, and the largest tuberculosis sanatorium, 300 beds.

New York state leads with a total of 925 new beds, Pennsylvania 632, California 440, Illinois 353, Missouri 233.

Although the actual number may be much larger, the average number of beds per hospital is probably no larger, inasmuch as all of the large institutions presumably have been accounted for and only the smaller ones omitted.

The photographs of some of the hospitals which were opened in 1919 indicate that the character of design has improved. The baldness and neglect of design on the exterior which prevailed a few years ago happily appear to be now considered inadvisable. It is more generally realized that a hospital of pleasing appearance has a desirable psychological effect.

The majority of the hospitals illustrated in this issue are exceptionally satisfactory from the viewpoint of good design; they indicate repose and

*The number of hospitals opened in 1919 does not appear to be much below the average of former years.*

*The reduced nursing staffs and higher wages for help of all kinds called for careful planning to effect the saving of time and labor. Labor-saving devices such as fast-powered dumb waiters, push-button elevators, refrigerating machinery, circulated drinking water, clothes chutes and similar devices were installed in increasing numbers, and durable materials which are easily cleaned and do not require replacing and refinishing at frequent intervals were more or less uniformly used.*

restraint and withal are not extravagant or over-ornamented. Without indulging in the use of costly materials, their beauty has been created by excellent proportioning and the intelligent use of ordinary materials.

The Illinois Central Railroad Hospital at Paducah, Ky., has been built on the site of the old hospital which was destroyed by fire. Fortunately, the fine old trees were not damaged

and the new building could be properly planned without necessitating the removal of any but the smallest. The inconsiderable elevation of the city above high water of the Ohio river made unwise the building of a basement under the whole building. The kitchens are in a separate one-story building, in agreement with southern experience and practice.

The new Columbia Hospital and its nurses' home, built on a large tract of high ground, overlooking Milwaukee, take the place of its old buildings in the heart of the city. The portion built is only one unit of the plan which has been made to develop a 500-bed hospital.

A central water sterilizing plant, floor lighting fixtures for night illumination of the wards, an electro-cardiograph, with wire and conduit, also telephone connection to many wards and rooms, which obviates the necessity of removing patients from their bedsides for the taking of cardiograms, and the signaling system by the use of which the patient can signal for any one of the more common things he may wish or need, such as "nurse," "water," "bedpan," or "urinal," save the nurses many steps and are among the innovations which may soon be in general use.

The building of a substantial, beautiful, and adequate nurses' home simultaneously with the hospital was unusual and is indicative of a commendable degree of foresight and concern for the nurses' welfare.

Lowell General Hospital, Lowell, Mass., has glass screens between the beds in the small wards and they are also used to subdivide larger wards

into four-bed units. Tray trucks to carry the food from diet kitchen to the bedside are also in use.

Pawling Sanitarium, at Wynantskill, N. Y., has installed the cafeteria system, and especially recommends this adaptation for sanatoriums and other institutions which have a considerable number of convalescent or ambulatory patients. This innovation has also been introduced in many institutions as a substitute for waitresses in nurses' dining rooms.

Recognition by the public of the necessity for tuberculosis hospitals has resulted in the building of many hospitals and sanitariums for this purpose. Several were opened during 1919. Among these, is the Norfolk County Hospital, Norfolk, Mass., which contains several unique features. The wards are illuminated sufficiently for the supervision during the night hours from the floor by blue lights in flush boxes with heavy plate glass covers, and the operating room has no lighting fixtures for night operations, as the walls and ceiling are illuminated by mirrors reflecting light from a source outside of the operating room itself.

Bristol County Hospital, Bristol County, Mass., is an illustration of a conversion, which economy may dictate in other instances. It was made out of an amusement park which failed to amuse, and the management reports that the result is not as unsatisfactory as the conception might indicate.

#### Patients Housed in Single Rooms

Two of the innovations which are being worked out in this hospital are the housing of all patients in single rooms, with plumbing for each separate room, or between each two rooms, and sending all supplies, on a telephone requisition, from the storerooms, located in the basement and in charge of high-class employees, to the various floors by power dumb waiters.

In large cities where the strike of coal miners and the difficulties of transportation have made the use of bituminous coal a necessity, air control or mechanical ventilation, which has been almost neglected, now deserves careful consideration. An ample supply of clean air is a requisite for a patient which does not require an advocate, but the greater amount of dust and soot in the outer air which enters the building through crevices around closed windows and through open windows is the cause of a tremendous amount of labor and of rapid deterioration of wall finish, woodwork, furniture, and linens. No figures have been compiled showing the saving in maintenance and replacement as between buildings for which air is washed and cleansed before introduction and those into which it is allowed to enter in its

raw state through open windows. This matter is, however, of such importance that it requires careful attention.

Notwithstanding the fact that the practice of the War Department in the design and construction of army hospitals improved toward the close of the war, and that plans for better hospitals than those built were under consideration, these structures were only temporary and complied only with the necessities of military use. They have not affected or advanced the art of hospital design for civil uses.

#### Many Buildings Started in 1918

Many of the hospitals which were opened in 1919 were begun in 1918 and early 1919, when the building industry had not revived to its full productiveness; material costs and labor costs were but little higher than they were in pre-war days, and hospitals of fireproof construction, well equipped and with all modern arrangements were placed under contract for a unit cost of 35 to 40 cents per cubic foot, possibly 25 to 30 per cent higher than in 1915. These costs have almost doubled since then, and all signs point to further advances for several years. It is apparent, therefore, that the cost per bed has increased tremendously—from \$2,500 to about \$5,000 per bed for a completely furnished and equipped modern city hospital similar to many in our larger cities. The increase in the prices of supplies and furnishings was not proportionately as great as the cost of building, for a good part of the increase in these commodities had occurred in prior years.

A large number of the buildings which were stopped by the war for almost three years are being constructed. The attempt to do in one year that which should have been done in three years, with new projects for buildings of all other kinds, is the cause of the great drain on building materials and labor, already reduced by the vast quantities destroyed by warfare and the arrest of immigration.

#### Car Shortage Hampers Construction

The demand for open cars, which are used for the transportation of the major portion of building materials, was so great during the coal miners' strike and has continued to the present time, that there are no signs of a change at an early date, and all work of construction is being seriously hampered thereby. Manufacturers of building material find great difficulty in securing raw material, so that their production is greatly reduced and they cannot obtain sufficient cars to move what they have manufactured, consequently building operations are extremely slow.

On account of the scarcity of material and labor and the high cost of building, many hospitals must continue to use old buildings and modernize these in accordance with available funds. This is parallel with the resolve of many persons to make use of their old wearing apparel and household furnishings as long as they can be used commensurate with decency.

and hospital supplies, in order to reduce the travel of nurses and other attendants, are obviously necessary. Likewise, the centers of food distribution and waste disposal should be so placed that they will be only a short distance from the bedside.

The use of durable material, such as permanent floor material and painted or enameled plastered



The Norfolk County Tuberculosis Hospital, Braintree, Mass., which was opened last year, is, as its name implies, devoted exclusively to the care of the tuberculous. It can accommodate seventy-one patients. It was almost a year in building and cost \$200,000. Harold Field Kellogg, Boston, Mass., architect.

Innumerable institutions sought to increase their bed capacity by various means, adding stories, wings, or other alterations. The high cost of building may, therefore, force a decline from the generally accepted and approved standards of arrangement and equipment.

Prohibition and work of some kind for everybody, at wages commensurate with good living conditions, appear to have reduced the number of patients in county and city institutions in which they can receive care at no cost. The patients in such institutions in past years probably came largely from the ranks of the unemployed or underpaid. As these classes have gradually disappeared, having become better earners, they have insisted on being taken to hospitals where they could receive more specialized attention and pay for the service rather than be charges of a county or city. The result has been that the large public institutions are not crowded. Some of them are filled to only half their capacity, and private hospitals are crowded to capacity.

The reduced nursing staffs and higher wages for help of all kinds make necessary the most careful planning to effect a saving of time and labor. Labor-saving devices, such as fast-power dumb waiters, push-button elevators, refrigerating machinery, circulated drinking water, careful distribution of plumbing fixtures, chutes, linen,

surfaces which can be easily kept clean by wiping or washing, and which do not require replacing or refinishing at frequent intervals, is of the utmost importance. These principles have always been fundamental, but are now more important than they ever were, on account of the greater cost of labor and materials.

An inquiry addressed to manufacturers reveals that a much larger number of hospitals is installing high class clothes chutes, dumb waiters, and similar devices than formerly. Hospital administrators realize that their institutions must be equipped with every service or item of equipment required to make their hospitals so complete that they will respond promptly to every demand of modern medicine.

Every service such as the laboratory, the electro-cardiograph, the bath departments, and the x-ray equipment can be made to bring a return which will raise the income. If the hospital cannot furnish these, this return will flow to other institutions, and will in time affect the patronage and reputation of the institution which lacks these facilities.

Now that many more persons seek hospital treatment than formerly, the care of convalescents should be developed. Inasmuch as they require less service and less attention, they can be housed in simpler buildings, which will cost less

per unit than a fully equipped hospital and which will bring a large return on the investment. Health and rest cures are also crowded to capacity. As it seems obvious that patients will wish to be under the care and observation of the

physician who attended them while in the hospital, it is apparent that hospitals can establish wings or pavilions for this purpose, to be operated in connection with the hospital, at an advantage to both themselves and the former patients.

## DEVELOPMENT AND PROGRESS IN THE FIELD OF HOSPITAL ADMINISTRATION

By ANDREW R. WARNER, M.D., EXECUTIVE SECRETARY, AMERICAN HOSPITAL ASSOCIATION, CLEVELAND, O.

NO startling changes in the field of hospital administration became effective in the year 1919, but existing tendencies to change were sharply accelerated, and real progress was, apparently, brought much nearer. This was due principally to two factors: first, the return to civil life of large numbers of physicians trained in institutional medicine and management in our military hospitals at home and in Europe; and, second, the wider general interest in the problem of hospital betterment, or "standardization," as it has come to be called, although no one now believes that a real standardization is possible, or that it would solve or even simplify the problem if it were. More organizations and more persons are realizing that the hospital problem is one in which they are vitally interested, and that it really affects them and theirs. The direct effect of these two factors has been to broaden and deepen the general understanding that hospital administration is a real specialty even in the medical social field, and that long systematic training and special adaptation are necessary for the development of a degree of skill justifying appointment to such posts.

The medical officers of the army and navy returned to civil life with very clear recollections of the varied conditions under which they worked; with a positive understanding of the value of organization in medical work and in medical institutions; and also with a conviction that the administrator, as the commanding officer, influences very markedly the work, working conditions, and the end results of the institution through his per-

*The return to civil life of large numbers of physicians trained in institutional medicine and management in our military hospitals and the wider general interest in the problem of hospital betterment, is making for real progress in the field of hospital administration. There is a great demand for more and better hospital executives. How shall this demand be met? At present hospital executives are secured and trained by practical experience as assistants. This is a slow process and does not attract men of sufficient caliber in sufficient numbers. Hospital administration must be held out to young men as an attractive and remunerative career.*

sonality and adaptability for the position through his knowledge of medical and general organization, and through the other qualifications essential to executive leadership.

This explains the change which all hospital administrators have noted in the attitude of their returning staffs toward the administrative work and department. Difficult staff members have apparently reformed. They do the

routine work of their departments with more care, punctuality, and exactness; they observe established rules and customs as never before; they now remember that there is an administrator with definite work and responsibilities and never assume his functions; they refer administrative matter to him for consideration and decision and abide by the decisions.

This change has been the end of some administrators' troubles, but it has been the beginning for others. The same staff member has acquired experience under various commanding officers in analyzing their work, and all the faults and shortcomings as well as the strong points of the hospital superintendent as an administrative officer are now more evident to him. He is expecting more of the superintendent as well as giving more himself. Some superintendents can stand with credit before this analysis of their work by staff members, but some can not. The field of hospital administration has gained much from the analysis and decisions of these many thousand personally and directly interested men, and staff members are in a position to make their viewpoint count, especially in a demand that the general adminis-

trator of the institution in which they are officers be a man properly trained, competent, and big enough for the position.

The tendency of the year under the stimulus of the new viewpoint of the returned army officer has been to broaden the scope of "professional" work. There has been, and is yet, a general sentiment in the medical profession that the man who is not daily using the stethoscope or the scalpel is not engaged in "professional" work and is, therefore, more or less apart from the profession. One physician who reached high rank in the Army Medical Corps remarked recently to the writer that he was having "real difficulty in adjusting himself again to *retail medicine*," by which he meant the meeting of the patients personally and doing the detail professional work. Have we not really developed two types of professional work—first, the "retail" or clinical, in which the physician has developed the personal skill in the use of the stethoscope or the scalpel and acquired a stock of such knowledge as is necessary for the direct contact with individual patients, and second, the "wholesale" or the application of medical service through the organization of larger groups of clinical physicians, nurses, and others into a smoothly working composite unit, serving relatively greater numbers than the same personnel could serve working individually? The management of such a unit is surely a position requiring special training as well as real ability in many phases of executive work; it surely produces medical results whether the position is filled by one having the degree of Doctor of Medicine, or not. It is "professional."

Many returned Medical Corps officers have desired to continue this "wholesale" medicine or administrative professional work. So many such instances in which the officers have applied for such work without previous experience in civil life or accepted positions as assistants, have come to the attention of the writer that the aggregate of the country must be a considerable number.

But what about the hospital administrator who is a layman? How does he come into this discussion? Many little incidents indicate a rapid development of opposition to the appointment of even really good stewards, accountants, pharmacists, or physicians as general superintendents simply because they were on the ground and knew something about the institution. On the other hand numerous incidents may be cited which indicate greater and more general recognition of the value of the lay superintendent who has learned the work of the management of a medical institution well, and who has become skilled, competent, and able.

A hospital superintendent does not need skill with the stethoscope or scalpel, nor does he need to know the mass of information required for "retail" clinical work. He does, however, need accurate and full knowledge of the policies, methods, and working equipment of "wholesale" medicine, the principles of business organization and administration, and many other things not taught in medical schools. It is, today as much as ever, a debatable question whether it is easier and better to acquire the required medical knowledge on the basis of other qualifications and training, or the other qualifications on the basis of a clinical medical training. It is perhaps better that this controversy remain for a time undecided in order that the field of hospital administration may accumulate the results of the best work of both types of men and women. In the smaller hospital in which the superintendent must personally direct more of the detail work, the nurse with some knowledge of business, of organization, and of the principles underlying executive work has proved especially efficient, and it is not likely that this situation will soon be changed.

The second factor, the development of the "hospital standardization" idea, has had its effect through the general thinking public—more far-reaching this past year than ever before. The points which the effort and movement for hospital standardization have fixed firmly in the minds of the thinking public are: first, that a group of good doctors does not necessarily mean a good hospital; second, that the welfare of the patients depends quite as much on the character of the hospital service as on the skill of their attending physician or surgeon, and that each is almost independent of the other. It is understood that the skill of an attending physician or surgeon can not prevent the unfortunate results arising from, or compensate for careless and poor hospital service.

When the public realizes that a proposition really affects "me and mine," it gets interested and inquisitive. The staff,—often unfortunately,—is largely exempt from scrutiny, criticism, or blame in questions relating to the efficiency of the institution. The superintendent and the trustees are compelled to stand up and face the responsibility; and both to the public and to the trustees the superintendent is the "general manager and responsible for results"; so the superintendent is critically inspected from both sides, and many times those on one side, or possibly on both sides, have wished that he had been a better man. In fact, any just criticism always results in the trustees' desire for a better general manager and an attempt to get one. But where, how?

Every hospital self-analysis, survey, criticism, or row in the whole country has added more or less to the rapidly growing demand for better hospital service and its corollary—better hospital executives. It is but arithmetic to determine that the country needs *more* hospital executives. When this is considered in the light of the fact that one frequently used source of supply, *i. e.*, the turning over of the management of a general hospital to a steward, accountant, pharmacist, or physician without any training or preparation for the work, is now in bad favor, we are compelled to do something about it. What shall that something be?

Training by practical experience as an assistant is good, but this cannot meet the demand for numbers, for two reasons: first, it is a slow process as long as the only instructor is experience, and trustees have not yet generally accepted the responsibility of putting the employment of assistant superintendents on any other basis than the actual temporary need for service to their hospital; second, the field does not attract men of sufficient caliber in sufficient numbers. Hospital administration must be made and must become known to young men as an attractive and remunerative professional career. Strong hospitals, especially those connected with universities, can recognize the need and the opportunity to develop organized courses of instruction in administration under the superintendent, as has been done, for example, at the Cincinnati General Hospital. But can we not take advantage of the present unusual situation, in which there is a general and urgent demand for more and better trained hospital executives, with a field unhampered by any established ideas, methods, institutions, or organization? Nothing will now need to be undone. All effort will mean progress. The situation will not continue long; something will become established very soon. Why should we not now settle the matter right by determining and establishing principles and policies which will place hospital administration as far ahead as we now see clearly that it must go, by organizing the machinery to produce routinely the kind of men and women we now know are needed for the work, and by meeting promptly the popular as well as the professional demand for hospital "standardization" through competency in the superintendent? Such a program is in no way visionary; it simply provides that hospital administration shall catch up with the development of our general health and welfare programs.

By far the most important development of the year has been the active interest in this problem taken by the Rockefeller Foundation—the most important because this Foundation is in a position

to grapple with the problem of the hospital administrator by collecting and correlating all available information and thought and to place this data before the group best qualified to determine the best mean between the practical possibilities and the ideal, and then to aid in the actual establishment of the approved policies and program.

In November a group of interested men called in conference on the general hospital situation by the Rockefeller Foundation agreed that the training of competent hospital administrators is a distinct problem needing study and help and that the field is now open, *i. e.*, the problem is not now receiving active and constructive attention from any organization. Since then there have been definite expressions of continued interest in this problem and several developments indicating active participation on the part of the Rockefeller Foundation in various other divisions of the hospital field. As it has become clearly understood that the Rockefeller Foundation can not enter the field of support to hospital maintenance, the interest of the Foundation in hospital work must necessarily be through the general problems, and of these the problem of the supply and the qualifications of the hospital executives is perhaps the one most pressing. It is reasonable to hope that a thorough study of the problem of adequate training of hospital administrators in sufficient numbers leading to definite recommendations will soon be made by this Foundation.

Justified hopes, accelerated tendencies, and crystallized opinions are indeed powerful factors to bring action, and well worthy of mention, but may he who writes of the field of hospital administration for 1920 have definite, accomplished acts and progress to record.

#### EMERGENCY HOSPITAL SERVICE RULES IN SAN FRANCISCO

An example of a well organized emergency hospital service is afforded by the administration attained in the San Francisco emergency hospital service under the direction of Dr. Alanson Weeks, and now to be continued by Dr. Edmund Butler. The following rules might well serve as a model for all emergency hospital services.

(1) Under no circumstances is any doctor of this service to take for his own any case first seen by him in an Emergency Hospital.

(2) Immediate notification of the family physician and the relatives of all cases brought to an Emergency Hospital. If patient has no physician, a list of at least six doctors, who are known to be reputable, is to be given him from which he may select one.

(3) The doctor on duty is directly responsible for the searching and booking of valuables of patients.

(4) An Emergency Hospital sticker reading "Emergency Dressing only. Have your own doctor examine at once," is to be placed upon all dressings made in Emergency Hospitals.

## PROGRESS IN NURSING EDUCATION DURING 1919

By ISABEL M. STEWART, ASSISTANT PROFESSOR, DEPARTMENT OF NURSING AND HEALTH, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, N. Y.

THIS last year has been an exceedingly critical and difficult one in nursing schools. Although the war was over when 1919 began, medical and nursing staffs were still disorganized and depleted and hospitals had not yet recovered from the terrific strain of the influenza epidemic which, coming as it did on top of the war, created the most difficult situation which American hospitals have ever had to face. Many

graduate and student nurses died in the epidemic and many more were obliged to give up their work. The whole educational program in most schools was suspended for weeks owing to the absence of lecturers and the critical situation in hospital wards. Indeed, many have not yet fully recovered from the demoralization of their teaching work during that time.

The main positive educational gain from the experience was the fact that it drew the pupils and the teaching and executive staffs of the hospital closer together and brought out an unusually fine spirit of cooperation and service. Whatever misgivings any one may have had before about the waning virtues of devotion and self-sacrifice in modern nurses, there could be no question of the heroism and self-forgetfulness of the great body of nurses in this country at that time, students as well as graduates.

#### Supply of Student Nurses

During the period of the war, applications to nursing schools had greatly increased, and in response to the appeals of the National Committee on Nursing, extra classes had been brought in to help in meeting war needs. It is estimated that in the 1,600 or more registered nursing schools in the United States several thousand more student nurses were enrolled than would have been under ordinary conditions. A fairly large proportion of these had been drawn from other occupations and had frankly enlisted "for the duration of the war." Most of those who were phys-

*The cause of the acute shortage of student nurses in the rank and file of the nursing schools antedates the war. The root of the trouble is largely economic. The remedy lies in better provision for the nursing service in hospitals in order to enable them to provide conditions which will attract young women in larger numbers. These conditions are: shorter hours of duty; less housework (at least after the elementary period); better housing conditions; improved teaching personnel, equipment and methods; wholesome recreation and social life; the elimination of the old rigid system of military discipline and a greater measure of self-government.*

ically fit remained through the epidemic, but with the signing of the armistice they felt their war service was over, and numbers dropped out.

Applications to nursing schools began from this time to drop off noticeably. The question of applicants had been a perplexing one before the war, but it was hoped that the almost universal interest in nursing which the war developed might continue

and that the newly aroused passion for patriotic work might find a congenial outlet in this permanent form of national service. These hopes have been disappointed. While it is true that the type of applicant in many schools has decidedly improved, and that several of the best schools in the country report no shortage of students, the scarcity of applicants in the rank and file of schools throughout the country is reported to be acute.

The causes of this situation go back much farther than the war. They seem to be due not so much to a lack of interest in nursing as to the fact that the average hospital training school seems to be unable to provide the conditions which attract young women in large enough numbers to maintain the present system.

With many other occupations inviting them and offering attractive opportunities and easier conditions of life and work, it is not, perhaps, surprising that many who really are deeply interested in nursing should hesitate before the long and exacting training and the very real sacrifices which are involved in the work of a nurse. There is no question but that hospitals have, as a rule, placed much too great a burden on their student nurses. The root of the trouble is, of course, largely economic, and the remedy must be found in increased provision for the nursing service of the hospital.

The most immediate reform is in the direction of shorter hours of duty. Although a few prominent hospitals have had an eight-hour day for

twenty-five years or more, and although the general movement for shorter hours in other occupations has gone ahead rapidly, hospitals have been as a rule exceedingly slow in reducing the excessive hours of their student nurses.

During the past year a definite movement has been set on foot by the League of Nursing Education, through its Committee on Education, and decided progress has been made. In New York City, for instance, there was on January 1, 1919, only one hospital with an eight-hour day, and that one had just begun. On January 1, 1920, there were seven whose hours had been reduced to this standard or very near it. Statistics for the country generally are being collected and will be published soon.

There is every indication that the solid sentiment of the country is back of this very necessary reform and that hospitals will be impelled by the force of public opinion, if not by actual legislation, to bring their hours in line with enlightened modern standards.

#### Readjusting Work of Student Nurses

It has been a constant criticism of nursing schools that they require their students to do a great deal of what would ordinarily be called housework, and that they insist on students repeating indefinitely more or less routine duties which demand little skill and have little or no educational value. Experiments have been made for the last few years with the use of paid hospital helpers or attendants for many of these duties, such as dusting, cleaning, making empty beds, folding linen, making dressings, and kindred duties, thus releasing the nurse for more of the actual skilled nursing work and making it possible for her to get more time for study. With the increasing scarcity of nurses, during the last year or two, hospitals have been employing these ward assistants more and more, and the results seem to be quite satisfactory. It is difficult, however, to secure such workers at present, even at forty or fifty dollars a month, which is often paid, and most hospitals continue to use the student's free service for all kinds of duties which could not possibly be regarded as essential to a training in nursing—at least after the elementary period.

#### Improvements in Courses of Study

In spite of all the dislocations due to the war and the epidemic, it is believed that there has been steady improvement in nursing schools during the last year along the line of standardization of courses and improvement of teaching methods.

The Standard Curriculum which was prepared by the League of Nursing Education a few years

ago has been pretty generally accepted as a desirable standard for nursing schools, and an effort has been made throughout the various states to bring schools more and more in line with this standard. Though there is still a very wide diversity in the courses of study of different schools and different parts of the country, we are gradually securing more uniformity and a better organized program of work.

There is a marked increase in the number of instructors employed in nursing schools and a much larger demand for trained instructors than can at present be met. Two or three large schools have recently appointed educational directors who are responsible for organizing and developing all the teaching work of the school. There is also a gratifying increase in well equipped classrooms and laboratories, and in other teaching facilities, though we have still a long way to go in this direction before our schools begin to compare with most other professional schools.

#### Affiliations With Technical Institutions

Because of the difficulty of securing trained teachers and proper scientific equipment, several nursing schools have turned over a good part of their preliminary science teaching to technical schools or colleges. In some cases two or three schools have combined their classes, and have made arrangements for a regularly organized course in some educational institution of this type. This is evidently a growing movement. In California, intending students of nursing are encouraged to include certain of the preliminary sciences in their regular high school course, and some credit is given for these on admission.

The pre-nursing or preparatory course for college women, such as was given in Vassar College and a number of other university centers during the summer of 1917, has shown on the whole satisfactory results. In spite of a very considerable reduction (over half) of the students entering the hospital training from this source, there are still several hundreds of college women continuing in nursing, and we have every reason to expect that they will be a decided asset, especially in educational and public health work.

The war experiment of reducing the time of training for well qualified college graduates is being continued by several representative schools who consider the plan workable and quite justified by the larger numbers of well prepared students who are thus attracted into nursing schools.

Hospitals have not been as wide awake as they should be to the need for wholesome recreation and social life for their workers, but much more emphasis is being laid on these things and their

relationship to efficiency and *esprit de corps* is being more widely recognized. During the past year social directors have been appointed in several nursing schools to help in making the students' home and social life more attractive, and more provisions are being made for recreation and enjoyment.

The interest in student government is also growing and although some failures in this new experiment are reported, there is a pretty general feeling that the old rather rigid system of military discipline is not entirely satisfactory either, and that some compromise needs to be worked out which will protect sick patients and secure efficiency in the hospital ward and yet allow more opportunity for students to govern the details of their own lives and to take some responsibility for the conduct of their own student body. Strangely enough the most extensive appli-

cation of the system of student government recently worked out, has been in the Army School of Nursing where it seems to have been successfully developed right in the heart of a military system.

### The Army School of Nursing

This school which was started in 1918 to help in meeting the need for army nurses is being continued as a part of the regular army nursing system. In spite of considerable depletion, the student body still numbers over six hundred. Through affiliations which have been arranged with a large number of general and special hospitals and with public health organizations, the students are having a wide and varied experience both in civilian and military institutions, and it is believed that they will be well qualified not only for army work, but for other fields of nursing service which they



The Pawling Sanitarium, Wyanntskill, N. Y., becomes the new home for the Lakeview Sanatorium at Troy, N. Y. The institution is devoted to the care of the tuberculosis patients in the county. Pember & Campaigne, Troy, N. Y., architects.

may wish to enter. The nature of this school makes it possible to try out some interesting experiments in nursing education which may be of benefit to nursing schools generally.

### The Non-Resident Student Nurse

Another war experiment, which has continued in a few schools at least, is the plan of having some of the student nurses live in their own or in approved homes outside the hospital, during part or most of their training. The Presbyterian Hospital in Chicago had at one time during the war as many as thirty students living outside. Most of these preferred to come into the home as soon as rooms were available, but a few have continued as non-residents through most of their course. They have an eight-hour day (9 to 6 p. m.) and do not come to the hospital Saturday or Sunday at all.

Although there are some evident disadvantages about this plan, it has proved to be entirely workable, and is recommended as an economical and practical way of increasing a nursing staff, especially where accommodations for students are limited. Then, too, students who otherwise might not be able to enter nursing schools at all, may be admitted as non-residents and live in their own homes, as they would in any other system of professional education. It is hoped that more experiments of this kind may be tried.

### The Training of Public Health Nurses

Although the work of public health nurses has been increasing rapidly for the last few years there has never been anything like the swamping demands of 1919. Here, again, the war and the epidemic were largely responsible for waking people up to the need for better home and community health work. Now every county and village wants a public health nurse of its own, and there is always much protest when no nurse is to be found for them.

Every effort is being made to open up training centers for public health nurses and to encourage hospital training schools to affiliate with these for the purpose of giving pupil nurses some experience in the public health field. During the year about a hundred schools have arranged such affiliations, and many more nurses are now being prepared, in some measure at least, for these newer branches.

There is every indication that a steadily increasing proportion of nurses will be engaged in public health work from this time on and that it will require a very special effort on the part of nursing schools to prepare the larger numbers of nurses required.

There have been many criticisms recently of our system of training young women for public health nursing and a few rather prominent public health experts have even offered suggestions for substituting in this field other types of workers without nursing training. A very able committee under the chairmanship of Dr. C.-E. A. Winslow has recently undertaken a serious study of the whole situation of training for public health nursing and has engaged an expert investigator, Miss Josephine Goldmark, to conduct it. This survey is not yet completed, but it promises to be the most important contribution which has been made in many years to the whole question of nursing education, and one which will have far-reaching results.

### Financial Support for Nursing Education

Efforts to secure independent endowments for nursing schools in order to improve and extend their educational work had already been undertaken by the alumnae of one or two schools before the war. This work is being taken up again and a vigorous campaign is being planned by at least one alumnae association—that of Johns Hopkins Nursing School.

Endowments and gifts to nursing schools have been pathetically rare in the past, but there have recently been some indications that the public is waking up to the needs of the student body as distinct from the needs of the hospital.

A few gifts to nursing schools have been recorded recently, among them a gift of \$10,000 to the Nursing School of Bloomingdale Hospital, White Plains, N. Y., and \$50,000 to the Mt. Sinai Training School, New York, which is to be devoted to the welfare of the student nurses.

### Scholarships for Nursing Education

A number of scholarships for nurses are available yearly from such funds as that of the Isabel Hampton Robb Memorial, and the Isabel McIsaac Loan Fund. Several hospitals are also giving yearly scholarships to their own graduates for advanced educational work.

Last year the large sum of \$115,000 was appropriated by the American Red Cross for nursing scholarships, the larger sum of \$100,000 to go to those wishing to prepare themselves for public health work and the rest to those taking special training for teaching in nursing schools. These scholarships have gone mainly to nurses who served in the Army, Navy, or Red Cross. The National Organization for Public Health Nursing also appropriated \$10,000 for the training of nurses for teaching public health nursing.

Recently the Federal Board of Vocational Edu-

cation has extended to nurses who have some disability as a result of their war service, the same opportunities for further training which are provided for men from the army and navy. This means usually a year or more of special or advanced training with fees and all expenses paid. Some of the states are offering similar educational facilities to nurses who have been on active service during the war.

### The Higher Education of Nurses

Largely owing to these unusual opportunities, most of our centers for the advanced education of nurses are this year crowded to overflowing, and although the demand for highly qualified nurses will still far exceed the supply, it is encouraging to feel that so many are getting ready to fill some of the more responsible positions both in training school and public health work.

In the largest of these centers of nursing education (Teachers College, Columbia University), about 295 nurses have registered during the present college year. Of these 15 are working for the Master's Degree and about 75 for the Bachelor's Degree. In the summer session of 1919, there were 175 nurses registered in addition to those above mentioned.

During the year several new courses for nurses were opened in universities, among them courses for public health nurses in Minnesota, Michigan, California, and Syracuse Universities. Since the opening of 1920, Leland Stanford has announced a course for instructors of nurses which is likely to fill a great need in the west.

Several additions have been made to the number of universities offering the combined academic and professional course in nursing and the B.S. Degree of which there are now twelve. The new courses are mainly in the far west, among them Mills College, Occidental College, and the College of the Pacific in California, Colorado University, and the University of British Columbia, Vancouver, Canada. Minnesota University has also during the past year developed the five-year degree course in addition to its three-year course leading to the diploma. The usual arrangement is two years in the university (concentrating on the sciences and on general academic work), then two years in the hospital followed by a final year of public health nursing, teaching, or some other branch of special work. A pamphlet on this whole subject is now in preparation by the Education Committee of the League of Nursing Education and full details of these and other interesting university developments may be secured there.

Another interesting development of 1919 took the form of summer institutes for teachers and

superintendents of nursing schools. One of these was held at the Illinois Training School, Chicago, and the other at Montana University. There is a great need for more of such courses throughout the country and it is hoped that they may be developed in time in each state.

### Reactionary Movements

It was perhaps inevitable that the difficulty of securing nurses during the last year or two should have revived again the old agitation about the "over-training" of nurses and the clamor for a cheap worker of the old servant-nurse type. A reactionary group of men has made strenuous efforts during the past year to stampede nursing schools into a reduction of their educational standards and to intimidate nursing leaders by a campaign of newspaper criticism and misrepresentation.

But apart from the effect which all such efforts have in discouraging young women from coming into the profession, nursing education has not been seriously injured by these attacks. They have only confirmed the belief in sound education as an essential qualification for safe and efficient nursing work.

With all these disheartening attacks on nurses and nursing at home it was particularly encouraging to have the enthusiastic testimonials of those who had seen the splendid work which American nurses did overseas. If any vindication is needed of the long struggle to hold up nursing standards, surely it was found in the experiences of the war both at home and abroad.

### The Future

No thoughtful person who studies the situation in nursing education today, could fail to be deeply concerned by the many difficult and critical questions which are waiting to be solved. To those who have been watching closely the signs of the times, there are many evidences that the old apprenticeship system which has served us as a system of nursing education for the past half century, is beginning to break down, and that some rather radical modifications will have to be devised to enable nursing schools to keep going—still more to keep pace with the rapidly advancing needs of this new day.

The acute scarcity of students which is pinching hospitals now, will in the end be a blessing in disguise if it only shows up clearly the very short-sighted, unbusiness-like, and ungenerous policy which most hospital officials have consistently employed toward their schools in the past, completely subordinating them as they have almost invariably, to the interests of the hospital. No kind

of school could flourish under such treatment. But for the determined struggle of many of the women who have been responsible for the teaching and training of nurses in these schools, the whole system would have broken down long ago. These women have stuck to their task in the face of every kind of opposition and discouragement, hoping to make the training worth while, even where as in many schools it was a case of making bricks without straw. Many of them are completely worn out and discouraged by the endless struggle, and it is now more and more difficult to get able women to take up hospital and training school work because of the general lack of support and the lack of freedom to work out the broad and progressive policies which the times call for.

If the present system of hospital-controlled schools is to be preserved at all, it will be by thorough-going reforms, such as have already been carried out, to some extent at least, in a very few progressive hospital schools. It is an undisputed fact that where living and working conditions are fair and generous, where students are happy in their work and in their social life, where the training itself is felt to be distinctly educational throughout, in theory and practice, there is no need to worry about applicants. Where these conditions do not exist no amount of publicity and no cheap "attractions" can make a school live and thrive.

It may be that like medicine, engineering, and many other branches of professional education, nursing will gradually evolve out of the stage of apprenticeship and will establish independent schools where a more systematic and a sounder education can be given. Arrangements could be made with hospitals for such practical experience as the student needs, but she would be

free from some of the unfair exactions which result from the hospital's demand for cheap service.

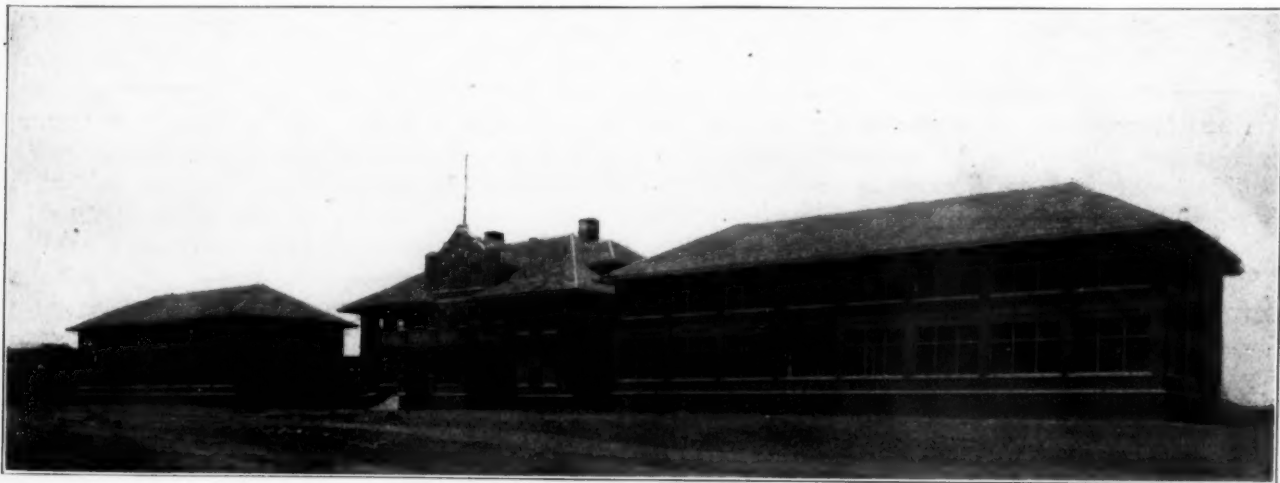
The present trend toward university departments or schools of nursing would seem to suggest that these institutions will probably assume more and more responsibility for organizing and developing the nursing education of the future, and our greatest hope undoubtedly lies in this direction.

For the present, the wisest policy is to hold fast to those principles which we have tried and tested and found good, and at the same time to take advantage of every possible opportunity to study and try out new plans which offer some hope of improvement in our present system. Perhaps in the future we may look back to these confusing and difficult years of the war period as the most decisive and fruitful in all our recent history.

#### LAUNCHES "KEEPING FIT" CAMPAIGN FOR AMERICAN BOYS

The United States Public Health Service has started a campaign in America to reach all boys between the ages of fifteen and twenty years and interest them in a campaign to keep themselves physically fit. This is not being done with the idea of raising the boys to be soldiers, but because there is one young man in every three who is physically unfit, not only to be a soldier, but anything else that requires strong, vigorous manhood. The importance of this formative period of a boy's life cannot be overestimated, since it is during these years that he forms the ideals and habits that go with him through life.

Surgeon General Ireland of the Army and Surgeon General Braisted of the Navy have taken a keen interest in this work, and have sent messages to the boys within this age group through Surgeon General Blue of the United States Public Health Service. These "Keeping Fit" messages heartily endorse the movement. The work also has the backing of the Y. M. C. A., churches, welfare organizations, and educators throughout the country.



One of the newest and most up to date tuberculosis hospitals erected in recent years is the Irene Byron Tuberculosis Hospital at Fort Wayne, Ind. Its bed capacity is 54. Charles Weatherby, Hamilton National Bank Bldg., Fort Wayne, architect.

## THE PRESENT TREND OF MEDICAL SOCIAL WORK

BY EDNA G. HENRY, DIRECTOR OF THE SOCIAL SERVICE DEPARTMENT OF INDIANA UNIVERSITY

**T**HE first medical social service department in America was organized in 1905. By September, 1911, there were six. After that the increase in their number was almost alarmingly rapid until the war was declared. Since the end of the war there is a more rapid growth. During the war medical social service was introduced in military hospitals. Since the war it has entered the Roman Catholic and the United States Public Health hospitals.

There are today, in the United States and Canada, two hundred ninety-six individuals or groups of individuals called social service departments. No two are precisely alike. They vary with the purposes of the institutions in which they are found, with the laws of the different states in which they are located, with the character of their organization, and with the type of workers whom they employ. But at least seventy-five of these have a claim to be called medical social service departments under the narrowest definition.

In order even to discuss the subject, the medical social service department should be defined even if the definition should prove not only to be unacceptable to, but even justly resented by, some good departments. A medical social service department is an organization within a medical institution. It gives social attention, looking to the care or cure of patients within that institution; and it does this at the request of—or by the permission of the medical staff.

Such organizations first were called hospital social service departments, but as the work spread west where there were more dispensaries which were not out-patient departments of hospitals, they became known more and more as medical social service departments. It is generally understood that they are not found outside of medical institutions. The distinction is not always made, however, even by the workers themselves, between the public health servants used by tuberculosis associations, child welfare agencies, or mental hygiene societies and the medical social worker who belongs to a recognized department.

### Organization of First Medical Social Service Departments

The first social service departments were formed and financed by groups outside of the hospital. The majority, and some of the best, are still so supported. Thirty-seven such departments say that they would have no other source

of income. It gives them, they think, a needed independence and does not at all interfere with medical cooperation. Also, the financing committee helps to educate the community. Several departments are paid for by schools of nursing, of which they are definitely a part. These, of course, constitute a great extension of the nursing service of the hospital and are a very definite part of it, even if paid for by others than the hospital itself. Fifteen departments originally financed by outside funds are now supported in part by the hospitals in which they are found. Twenty-six are wholly so financed, either by the hospital or dispensary itself or by the city boards of health, state boards of charity or universities which also finance the medical institutions in which they are found. The present tendency unquestionably is toward the last method. Nor is there much question about its being the best way in all respects, except for those departments long well established upon another basis.

There are, however, several objections to this method at present. They are based largely upon unfirm foundations and will disappear with time and the further efficiency of the departments. It is true that today a hospital just starting such a department is very apt to demand from it, and to be satisfied with, merely follow up work for a dispensary or financial investigation for a hospital. Sometimes the department is expected to finance itself by such saving. Such practice is most certainly not medical social work. It is not even social work. It is but a thinly disguised phase of hospital administration. The well organized social agencies of a city might complain justly that "it is absurd to think that physicians are competent to direct social workers."

One department, which is the most scrupulous about conference with, and service to, the physician, takes the ground not only that it is a crime of ignorance for any medical social worker to say to a physician, "this patient has heart disease," but that it is almost equally sinful for a physician to suggest to the worker the paying of rent or the breaking up of a family. Part of this difficulty arises from the fact that thus far most medical social workers have been nurses, trained always to look to physicians for direction. Part of it arises from the complacent ignorance of outside social agencies concerning medical social service departments, what they are or should be. As a matter of fact, many of the departments them-

selves, outside of a clearly felt obligation to the institution and to its patients, are a bit hazy as to their purpose in life. There is coming to be, however, a more and more well-defined conviction that a medical social service department, working with its physicians, ought to help a medical institution to cure its patients, and at the same time to study the physical and economical conditions which create those patients. It further should seek for cooperative aid in the community to remove those conditions.

### Cooperation with Desirable Welfare Organizations

One of the reasons why other social agencies regard medical social service departments with a critical eye is because of their real lack of wisdom in the giving of relief. There is even yet a radical difference of opinion on this subject. The medical social service department which is concerned for a patient wants for that patient, not what somebody thinks is good for him, but what he really needs in order to get well. It is an unusual head worker who will not try to find a way to get it. She has seen the patient sick and suffering and knows from his doctor precisely what it will take to mend him. It is a courageous department, and one of much faith, which believes that its own withholding of relief will tend to improve the standard of family work in its community; but it is a fact that it will. In those cities where the medical social service departments depend upon local relief agencies, these admit heartily that the departments unquestionably have improved the standards of social work, that there is better cooperation, more attention paid to physical conditions and more adequate relief given. It is perfectly natural that where the departments take another attitude, the charity organization societies should regard them as pests and think their influence bad or negligible. Unquestionably the present trend is for the medical social service department to give no relief, with the possible exception in some cases, usually in those financed by the hospital, of glasses, orthopedic and kindred appliances. In those communities where cooperation is poor, where relief is inadequate or ungente, or ignores the physical condition, the medical social service department probably will continue to supply at least part of it.

The question, not only of relief, but of much of the character of case work done by the social service department, is further influenced by the type of training or want of training the worker in charge has had. The first workers were nurses. Too many since have had no training at all. Even yet, while many departments are manned by col-

lege women, too many are in charge of the inexperienced. The majority are still managed by nurses. Too often a medical and not a social training is demanded. This begins to be recognized as a mistake. It is now commonly conceded that, although some of the greatest medical social workers have been nurses, they have been successful, not because they were trained nurses, but because they also were women of exceptional character and education. In the majority of social service departments no one but a nurse will be considered, even yet; but even in these departments the demand now is for graduate nurses with additional social training. A recent inquiry made of a large number of departments concerning the training they desired for their workers brought a majority of answers asking for graduate nurses with one or two years of social training. Five insisted upon people with a college degree or its equivalent. One said that it had an open mind upon the subject. It would take with equal willingness a graduate nurse with a couple of additional years of social training, or a college graduate who had had some training or experience in a hospital, provided either was a woman of the right character, temperament and education. This indicates the present trend very clearly.

The demand of today is for an entirely new type of woman, educated for a new profession. While it is not always consciously recognized, the knowledge now exists that if this work is to be done successfully it must be done by women of a sort more nearly resembling the physicians with whom they work. As the demand of medical schools increases for previous college education in its students, the demand for college work for medical social workers will increase.

There have been many motives for the organization of medical social service departments. The first were, perhaps, human pity, increased efficiency for the dispensary and economy for the hospital; but very soon the idea of teaching entered in. This was in part because there was a scarcity of medical social workers, in part because some of the social service departments belonged to universities or training schools for nurses. The underlying but usually unnoted reason, however, is that the medical social worker has no value except as she is a teacher. She must interpret and reiterate the doctor's orders and teach the patient. She must interpret the community's needs to the doctor, and illuminate the background of the patients' ills to student nurses and medical students. Two departments connected with universities are teaching social work, with the patients of medical institutions as laboratory material. One of these

universities goes so far as to say that it considers this teaching valuable as general education, not only as professional training.

There have been more student nurses in medical social work than any other kind of students. They, too often, have been taken merely because more work could be done with them. In many departments, however, a real and honest effort is made to convert student nurses into medical social workers; while one department is frankly teaching them that they may be better nurses only. In other words, medical social service departments, even where they have not realized it, are becoming an educational force. They are making for the spread of greater knowledge concerning social problems, especially those in which disease is a factor, their proper solution, and the power of preventive medicine. They could be made, if the institutions of which they are a part but wished it, a great existing force in preventive medicine.

It is possible that it will not be many years before the medical profession will see in the social service department the instrument by which it consciously may seize upon and use the science of sociology for its own purposes, even as it has used all other sciences, in the order of their development. The psychiatric social service departments, although the last organized, are scientifically far in advance of the other medical social service departments. It is not often recognized that this is true because, more than others, they depend for their efficiency upon the more advanced science of psychology rather than upon sociology. Departments of the future will have to work out, in connection with the professors of medicine and the sociologists, a teaching branch for their own work which will not only perfect it for the care of all types of patients but will make the new science valuable to medicine. That it can be made valuable is proved already by the striking success there has been in some places in the introduction of a course given by medical social workers to students of medicine.

#### Legal Control and Case Work Necessary

This introduction of teaching in the work of social service departments has deceived some into thinking that all departments should teach. This would be most unfortunate. Most departments should and do concern themselves with the care of patients only. The majority of them if they will look into their records, will find that their first cases presented a mental or nervous problem, that the next ones were tuberculous, and the next cardinals. It is not by accident that national societies for the prevention of these conditions have

been organized. The discovery by medical social service departments that heart disease presented a social problem and that the care of patients suffering from it resulted both in help to the patient and economy to the hospital, has started a movement less noticed but as influential as that for the care of sick children. Long before there was prohibition or any public control of venereal disease, medical social workers stated that there would have to be legal control of both problems before they could be fully met. Case work was effective but not sufficiently far reaching. The medical social service departments are now calling the attention of tuberculosis societies and the United States Public Health Service to the fact that legal control without case work is almost equally ineffective.

#### Social Service an Educational Force

Medical social service departments are becoming self-conscious. They begin to realize they are an educational force, but are of no value unless they first educate themselves and do their medico-social work well, even to the following of it into the community. While more and more departments are relying upon other agencies for material relief, they less and less are transferring the care of their patients to others. One hospital, which receives patients from an entire state, even has a social service department with a state worker who follows them home. Many of the great eastern hospitals, who long have done similar medical work, are attempting to secure care for their patients in the most remote communities.

Medical social service departments, then, are becoming more and more a part of the institutions which they inhabit. They are releasing, gradually, the question of financial relief to others and are giving more attention to their own problem, that of the physical condition. Constantly their responsibility for the patient leads them farther from the hospital door until a real sense of responsibility to the community as well as to the patient is being developed. They are a big factor in the new belief that a hospital ought to be a social asset.

Medical social service departments have a chaotic, if beautiful, past, but a future which no one can see. Both the medical profession and the sociologists should recognize in these organizations an opportunity to find out how much physical conditions really contribute to social disease, and to learn how much sickness is due to social inadequacy. Hand in hand they may remake the world, for the social service department, among other things, marks the advent of the science of sociology into the field of medicine.

## SALIENT POINTS OF PROGRESS IN TUBERCULOSIS SANATORIUM DEVELOPMENT IN 1919

BY T. B. KIDNER, INSTITUTIONAL SECRETARY, NATIONAL TUBERCULOSIS ASSOCIATION, NEW YORK CITY

**N**OTWITHSTANDING that the year just closed was in many respects so grievous a disappointment of those high hopes and ideals with which it was entered upon by a war-weary world, it is good, in looking back, to find that in the narrower field of tuberculosis sanatorium work, progress was made which cannot but be regarded as gratifying. In spite of the high cost of materials and labor during 1918-19, no

less than twenty-five new sanatoriums were opened during the year 1919, with a total capacity of 1,263 beds. It is true that the increase in the number of beds available throughout the country was not large, but it is interesting and significant to note the groups into which these new institutions fall, as follows:

State sanatoriums (2 in U. S.; 1 in Philippines)	3
County sanatoriums (2 of them replaced old smaller county hospitals)	15
Municipal sanatorium	1
Private sanatoriums	4
Preventorium	2

It is to be noted that state, county, and municipality are included; private initiative is still at the fore; and, perhaps best of all, the children were not forgotten, as shown by the fact that two preventoriums were opened.

### Sanatorium Legislation of 1919

The record of provision for the future which was made during 1919 is also encouraging. By legislation duly passed, four states have made provision for a total of seven sanatoriums, as follows:

**Idaho:** An act providing for two sanatoriums, one in the north and one in the south of the state.

**Maine:** An additional appropriation for a new state sanatorium, supplementing an appropriation made in 1917.

*In the field of tuberculosis sanatorium work progress was made in 1919 which cannot but be regarded as gratifying.*

*Among the achievements are these:*

*The opening of twenty-five new tuberculosis sanatoriums with a total capacity of 1,263 beds.*

*Four states appropriated funds for seven new state tuberculosis sanatoriums.*

*United States Public Health Service opened four tuberculosis sanatoriums for former service men.*

*Auxiliary methods of treatment for tuberculosis more largely employed.*

**Oklahoma:** An act providing for three sanatoriums, two for white persons and one for negroes, and also making an appropriation for maintenance for two years.

**Virginia:** Provision made for an additional state sanatorium.

County and local sanatorium authorities were not behind, for the record shows that of this class of institutions, nine were under construction; sixteen had secured a site

or an appropriation, or both (some probably under construction by this date); and three made appropriations providing for an increase in capacity.

The foregoing does not take into account the sanatoriums opened by the United States Public Health Service for the care of tuberculous ex-service men. These, located at New Haven, Conn.; Greenville, S. C.; Palo Alto, Cal.; and Deming, N. M., provide something over two thousand beds.

### Rejected Draftees Require Treatment

Considerable though this provision be, it is evident that the work of the United States Public Health Service in this direction is little more than begun. In addition to the number of men already discharged from service as tuberculous and those definitely under treatment for this disease in army and navy hospitals, all of whom are potential cases for care by the Service as beneficiaries of the Bureau of War Risk Insurance, the recent passage of the Sweet Bill by Congress brings under the provisions of the War Risk Insurance Act some 205,000 men, many of them tuberculous, who were passed by the draft boards, but rejected after arrival in camp or cantonment by the army medical officers. Estimates vary as to the proportion of men rejected in camps, as suffering from tuberculosis, who will require sanatorium treatment, but in a statement just presented to Congress (House Document No. 481) the United States Public Health Service estimates that by

1924, when the "peak load" is expected, sanatorium accommodation must be available for not less than 12,400 tuberculous ex-soldiers, sailors, and marines, as beneficiaries of the War Risk Insurance Act. The document in question asks for an appropriation of \$85,000,000, to be spread over several years, to provide for the hospitalization of ex-service men; provision being made for general, tuberculosis, and psychiatric institutions.

In passing, it is interesting to note the use of the word "hospitalization" in this sense, which seems to have come about since our participation in the Great War. Formerly, in this country, the term was chiefly used in a sinister sense, to denote the bad effects of idleness ensuing from a prolonged sojourn in a hospital or institution.

### An Awakened Public

References to the revelations from the draft boards' examinations of the sad lack of health among the nation's young men have been very numerous, both in professional and general journals and in the public press, and various hopes and suggestions have been put forward in consequence. Perhaps in no single disease or disability have the lessons to be derived been pointed out with more force and effect than in tuberculosis. Notwithstanding the widespread campaign against this disease, the public at large had not realized its extent, but the figures of the draft boards have brought home to many more persons a knowledge of its ravages and have turned public attention towards means for its treatment and possible eradication. In at least one of the states which have made provision for sanatoriums during 1919, the legislative campaign was made almost wholly on the facts revealed by the government statements as to the medical examinations of candidates for the army and navy.

But the establishment of sanatoriums alone is not sufficient, and side by side with this must go the organization of public clinics, home visits by tuberculosis nurses and other health workers, co-operation of the medical profession, the establishment of preventoria and open-air schools for children—all measures on the preventive side. In these several directions much progress has also been made during 1919. In connection with public clinics, it has been proved that these need not be confined to large centers of population, for traveling clinics have been organized successfully in several states, notably in Washington, Illinois, New York, and Kentucky.

The work of the Home Service Division of the American Red Cross among the families and dependents of men in the service has given a great

impetus to the movement for dissemination in the homes of our land of information on health matters in general and tuberculosis in particular. The announcement of the peace-time program of the International Red Cross is fraught with significance for all health workers, and of tremendous augury for future good. The medical profession, always self-sacrificing, has also done its part nobly and whether or not the much talked of "socialization" of medicine is "a consummation devoutly to be wished," it seems certain that the wider interest of the profession in other than the mere treatment of disease which was so manifest in the year (and years) just closed, will develop more and more in the coming decades.

For the children, some progress was made in 1919, though not nearly as much as was needed. But the leaven is working and very few of the city school boards which undertook new buildings last year did not provide for open-air schools, with their concomitants of feeding and home visits for those children suspected of, or suffering from, tuberculosis and other diseases or subnormalities. In places, too, efforts were made to overcome some of the bad effects which have followed the blind adherence to mechanical systems of ventilation by public school authorities on this continent, and several successful installations of "natural" ventilation systems have been noted.

Apart from the broad field of preventive measures, 1919 was full of significance on the therapeutic side of tuberculosis work. Splendidly led by the Surgeon General of the Army, there has been a remarkable broadening of the conceptions as to the treatment of tuberculosis. No longer is it the custom for a patient to be discharged as apparently arrested and advised to "seek some light outdoor occupation," only to "break" again in many instances in a comparatively short time; but instead, from the first his "reconstruction" into a useful member of society is aimed at. The theory of exercise and graduated work in the therapeutics of tuberculosis was not new, but never before had it been possible to attempt on a large scale and under the direction of so large a number of physicians skilled in the treatment of the disease, such an experimentation, classification, and verification of the therapeutic value of occupation in tuberculosis. It seems probable that in years to come, 1919 will stand out as the year in which the value of occupational therapy in the treatment of tuberculosis came to be fully recognized and began to be generally applied. Side by side with this was the recognition of the necessity of providing proper recreation—organized, adequate, and varied—to assist in inducing that restfulness of mind which has come to be

considered as of almost equal importance with restfulness of body in the "cure" of tuberculosis.

Almost throughout the treatment, even during the "infirmity" period, it was found possible in army sanatoriums to use occupational therapy with good effect. Later on in the case, when the semi-ambulant stage was reached, a wider variety of occupations was organized, while for the ambulant period, classes in a wide range of studies and workshops offering training in various crafts were installed and employed with excellent results in sustaining morale, the arrest of the disease, the physical improvement and hardening of the patients, and, last but by no means least, an increase in the capacity and earning powers of many of them.

Thus it has come about that features of construction and administration which were confined only to a few civilian institutions are being taken under consideration by sanatorium authorities on every hand. Medical officers who observed the effect of organized occupations for the patients under their care in army hospitals are returning to their civilian spheres and many of them are urging the provision of accommodation for occupational and vocational training in classrooms and workshops in civilian sanatoriums in which they are interested.

#### Advances Made in 1919

Still other advances were noted during 1919. The vocational rehabilitation of the disabled from the war has given a great impetus to the study of occupations from the standpoint of their feasibility for men suffering from some bodily handicap, whether from wounds or disease. This has involved more attention to the post-sanatorium life of tuberculous persons and their employment in suitable occupations. Three important contributions were made to this subject during 1919 by the Federal Board for Vocational Education, aided by a special committee appointed by the National Tuberculosis Association. The first was a study of occupations to discover, if possible, whether lists could be provided both of suitable and inhibited occupations for the tuberculous, but resulted instead in the formulation of a set of standards capable of being applied to any occupation, by means of which its suitability, or non-suitability, might be judged. A second useful contribution was a study of that dream of many tuberculosis workers, the colony—agricultural and industrial—wherein tuberculous persons and their families may live useful lives with at least a favorable chance of living out "many days and full of happiness." There are great difficulties in the way of this achievement, but the pros and

cons of such an enterprise are being discussed widely as a consequence of the publication of this study, and it is hoped its realization is appreciably nearer in consequence.

#### Real Progress Is Apparent

A third study dealt with the project of productive vocational workshops for the rehabilitation of tuberculous ex-service men, but is equally applicable to civilian sufferers from the disease. The establishment and successful carrying on of such workshops have already been proved to be feasible in the well-known Hochhauser experiment in New York City, where another similar project has also been undertaken. Active steps are also under way in other large cities to establish such workshops.

Distinct contributions were also made during 1919 by the Federal Board for Vocational Education to the problem of post-sanatorium care of the tuberculous by the establishment at several different points of vocational training centers where arrested cases may undertake vocational re-education for some new and suitable occupation under medical and nursing care and with proper conditions of housing, feeding, study, and work. The experience of these centers will react upon and be linked up with sanatorium work and will thus prove an important part of the wide field of restorative work.

With all its discouragements, a calm survey of 1919 shows, then, that progress has been made, both in preventive and curative measures. Numerous hospitals and sanatoriums for the treatment of tuberculosis were opened and many others projected; auxiliary methods of treatment were more largely employed; after-care received increasing attention. Although there is an enormous work yet to be done, when looking backward over 1919, may not sanatorium and other workers in the field of tuberculosis say, with all modesty, in the words of Othello, that they "have done the state some service"?

Forsberg: Do you know what prunes are?

Aitken: No, what are they?

Forsberg: Raisins with inflammatory rheumatism.—  
*The Stethoscope.*

A nurse in a dispensary tells this story: "One of our poor patients had her jaw fractured by her drunken husband breaking a chair over her head. As he was out of work and they had a lot of little hungry mouths to feed, poor Mrs. Mooney had to do washing, which was very detrimental to her jaw healing. One day I went into the room to see how she was getting along, and some one called me 'Mrs.' I said, 'I am Miss, not Mrs.' She turned and gave me the most pitying look, and said: 'God help you, dear, and haven't you a man?'"

"No," I said, looking at her poor forlorn face, "I have no man, but I have a whole jaw."

## THE 1919 LABORATORY FIELD IN RETROSPECT

BY LOUIS B. WILSON, M.D., DIRECTOR, THE MAYO FOUNDATION, ROCHESTER, MINNESOTA.

PERHAPS the greatest progress which hospital laboratories have made during the year 1919 is in the markedly increased appreciation of their value by clinicians. This has grown out of the more widespread intimate contact of clinicians with laboratory procedures during the war. During 1917 and 1918, one-fourth of the medical profession of the United States was called into active service in the United States

Army, and served either in camps in the United States or overseas in the care of sick soldiers. In all hospitals in the United States and in all except field hospitals in the American Expeditionary Forces, laboratories were in constant operation. By the end of November, 1918, 1,450 medical and sanitary corps officers were in the laboratory division of the medical department of the army. These men were drawn from university, federal, state, municipal, and hospital laboratories. They were brought together in the army, in some instances given special training in laboratory work, but in any event rapidly molded into a laboratory division which, although always notoriously undermanned, almost always "delivered the goods." By the time of the signing of the armistice the quality as well as the quantity of laboratory work which had been accomplished in the United States Army was simply marvelous.

Many medical officers during their civil practice had not had access to adequate laboratory service and had not previously known what efficient laboratory assistance might be. In the army, at first some of them were skeptical of its benefits and ignorant of the help that the laboratory might give them.

However, most of them soon learned that here was assistance which they greatly needed, and they soon came to appreciate it. Thus, in whatever clinical field,—medicine, surgery, or what not,—they might be working, they came to rely constantly upon the quick and accurate service rendered by the army hospital laboratory.

*The more widespread, intimate connection of clinicians with laboratory procedures during the war has resulted in a greater appreciation of their value.*

*There is great need for more laboratory housing and equipment. Hospitals are urged to borrow from army experience and erect, even at the sacrifice of architectural beauty, buildings which, meeting fire regulations, will provide as much space and light as can be obtained from the money available.*

*The laboratory provided, the next greatest need is for trained laboratory men for every sizable, honestly conducted hospital.*

During 1919, most of the 33,000 medical officers left the army and went back to private practice. In many instances they went back to practice in connection with hospitals in which the laboratory equipment and personnel were totally lacking or pitifully inadequate, and, remembering the aid which they had received in their work in the army, they began at once asking that better laboratory facilities be pro-

vided. These requests usually have been for the "common garden variety" of laboratory procedures, such as urinalyses, hemoglobin estimations, differential blood counts, bacteriologic examinations, and the like, although there has been demand also for the more complicated procedures of serology, blood chemistry, and fluoroscopy.

There has also been a most wholesome increase in the appreciation on the part of clinicians of the importance of autopsies. The autopsy service rendered by the pathologists of the American Expeditionary Forces was one of the finest that any organization has ever known. Through it many clinicians and surgeons for the first time came to realize how frequent and how great were their errors in diagnoses and treatment in fatal cases inspected by a competent pathologist at the autopsy table. Many clinicians now really come to postmortems on their patients rather than merely say that they would like to come,—a practice which, if persisted in, will do much to improve the professional work of hospitals.

And how is this suddenly increased demand by clinicians for competent laboratory work being filled? I regret to say that I fear most inadequately. Inadequately, because of lack of proper laboratory facilities and lack of properly trained personnel.

The situation in laboratory housing and equipment is serious. In the army, men learned that the finest kind of laboratory work could be done in barracks with relatively simple equipment, but limited ground space and wise fire ordinances forbid the building of barrack-type buildings in con-

nection with most hospitals. At the same time, with the present high cost of materials and labor, and the scarcity of glassware and laboratory apparatus, even well to do hospitals are loath to make the extension of laboratory space and equipment necessary to meet the demands for more and better laboratory work. Only a few hospitals have devoted part of their building fund to improving the quality rather than increasing the quantity of their work, by adding laboratories rather than beddage. One that has done so is the Philadelphia General (Blockley), which has just dedicated a magnificent \$300,000 laboratory building.

It is to be hoped that hospital boards may borrow as much as possible from the army experience and erect, even at the sacrifice of architectural beauty, structures which, meeting fire regulations, shall otherwise provide as much space and light as it is possible to obtain for the money available. If this is not done and done soon, it is to be feared that this, which should be the beginning of the golden age of scientific medicine because of the conditions mentioned, is apt to be the beginning of a period of deterioration in the fundamental medical sciences. Radical steps must be taken immediately to provide in some measure the facilities which the present clinical interest demands.

### More Laboratory Men Needed

Let me not be misunderstood, however. The greatest need at present is for well trained laboratory men. The erection and endowment of hospital laboratory buildings are very important, but it is futile to hope that patients in this day and age can have their best interests served and guarded by the scientific work of medical men who are laboring solely for love.

There never have been enough laboratory men in the United States to fill the demand. Because of lack of adequate remuneration they have constantly gone into executive or clinical work. In 1917 and 1918 many more of them went into these fields in the army, either from choice or from selection. When those who were in military laboratory service were discharged from the army, many of them believed that it was an opportune time to switch from the laboratory to clinical fields.

This choice was made in many instances because of the meager financial returns in laboratory work. The financial remuneration of the clinician, who stands next to the patient's pocket-book, is so much greater than that of the laboratory man, who is several removes therefrom, that, unless the laboratory man is convinced that he has not the capacity for clinical work, or is so

much interested in the scientific side of medicine that he prefers laboratory work with all of its disadvantages, he is almost certain to drift into clinical surgery or medicine.

The change from military to civil life furnished the break for which many laboratory men were waiting. Today the country is seething with would-be surgeons who have just come out of the army. A few are going into internal medicine, but practically none into laboratory positions. As a result, every laboratory director has on his desk a stack of requests from hospitals and teaching institutions for recommendations of men to fill laboratory positions, and he knows of none to recommend who will take the positions.

### Laboratory Consultants Essential

It has now been demonstrated, apparently beyond peradventure, that the well trained laboratory man is an absolute necessity in every sizable, honestly conducted hospital. No way has been found for him to receive his pay directly from the patient, even in pay hospitals. He should not work for charity, even in charity hospitals. It remains, then, only that the laboratory positions in hospitals shall be endowed, and the endowment shall be adequate to lure into and hold in laboratory work the best minds in the medical profession. The laboratory officer of little experience or weak personality is apt to become only an opinionless technician for the clinician, a condition which frustrates the chief objects of the laboratory, namely: experienced consultation with the clinician concerning disease processes present in the living patient, and thorough and fearless review of the diagnoses and treatment of all patients who die.

To be worth anything, the head of a hospital laboratory must be much more than a technician. He should be the real inspector of the other professional services. He must have opinions. To have opinions that are worth anything, he must have independence. To have independence, he must have a good living, and his remuneration must be great enough to hold him in the laboratory as a life job. If all hospitals of 200 beds or more would endow the position of chief pathologist with from \$6,000 to \$10,000 a year, with proportionate salaries for assistants and technicians, and with an adequate budget for supplies, it would be but a short time before the laboratory branches would contain enough high class young men to perform adequately the important professional functions of the ideal hospital laboratory head. Let us hope that 1920 may see some decisive steps taken by large hospitals to bring about this desired result.

## HEALTH PROGRESS IN INDUSTRY IN 1919

BY BARROW B. LYONS, EDITOR, HEALTH AND MODERN INDUSTRY DEPARTMENT, THE MODERN HOSPITAL

THERE is nothing more notable in the development of industrial medicine during the past year than the very greatly increased interest in the subject among medical men. In almost every industrial town in the country some physician or surgeon begins to stand out prominently as the one most competent to handle industrial accident cases, and in a number of the large cities there are to be found men who have developed a more or less extensive service through which varying types of industrial, medical, and surgical assistance is rendered by a group of men. Sometimes such groups are in the form of a partnership, but more often are under the leadership of some medical man who possesses ability to organize and direct, an ability generally supposed to be rare among medical men. If as exceptional as is supposed, it is not unlikely that this is the case only because few "legitimate" opportunities have before presented themselves for exercising it.

New conditions, however, have opened up new opportunities, and today the most wide awake leaders of industry are searching for men who can organize a direct health work in industry, which calls for the highest type of leadership, great ability in securing cooperation of all branches of industry, and unusual administrative genius. It is as yet impossible to gauge accurately the development in this direction, but any one in touch with the industrial health movement must be impressed by the growing number of physicians and surgeons who are being attracted to these problems in industry, and the rapidly increasing demand among intelligent employers for the new service that is being offered.

As a result, the financial attractions in rendering service in this direction have increased. This is evident by the success of a firm of industrial physicians and hygienists which was organized during the past year in a middle western town, and which specializes in rendering advice in industrial health matters. When a commercial enterprise decides to establish a health or hospital service for its employees, it may consult this firm as to plans and methods. This firm will plan industrial hospitals and dispensaries and install them; it will organize record systems, and develop plans for making the work effective, but it does not undertake to administer the departments which it organizes.

In order to meet the growing demand for industrial surgeons, post-graduate courses in Indus-

trial Medicine and Hygiene have been developed by a number of the leading medical schools during the past year, among them being Harvard University, Pennsylvania, Cornell, Columbia, Ohio, Rush Medical, University of California, and University of Cincinnati Medical College. When this is considered in relation to the ultra-cautiousness of such conservative organizations, this is a truly remarkable development, and reflects most intensely the interest in industrial medicine mentioned in the first paragraphs of this review, which interest is increasing so fast that its growth is difficult to measure. While these courses were developed partly because of the request of the Division of Industrial Medicine and Hygiene of the now defunct Working Conditions Service of the Federal Department of Labor, this request was based upon a very large demonstrated demand. In order to meet this demand, the Division of Industrial Medicine and Hygiene of the Working Conditions Service started an information bureau to put industrial medical men in touch with opportunities for service, but it was unable to find a sufficient number of qualified men to meet the demand.

Much has been written during the past year about the failure of existing facilities properly to care for industrial accident cases. There is no question that the service rendered by many hospitals and individual surgeons is far below the best standards. In a paper read before the sixth annual meeting of the International Association of Industrial Accident Boards and Commissions, held at Toronto, Canada, last September, Dr. Otto P. Geier, director, Employees' Service Department of the Cincinnati Milling Machine Company, pointed out that:

"The medical department of each industrial commission must be given adequate funds, sufficient power and personnel, so that all of the work done for the commission may be carefully analyzed, to the end that the incompetent will no longer be permitted to attend the industrially injured.

"Only in disputable cases," he said, "does this staff (that of the industrial accident board) come in contact with the surgeon or physician who is rendering the bills for his service. Because of this long-distance, utterly inadequate appraisal of the surgical field of work, because of this entirely impersonal relation that exists between the surgical staff of the commission and the surgeon or

physician who attends the worker, there has grown up a more or less cold-blooded comptometer method of arriving at a decision as to whether this bill or that bill for services rendered shall be allowed or shall be reduced. As things are today, a premium is almost set upon securing low grade, cheap service by the employer or insurance company. . . . Along with the establishment of a strong, highly intelligent, medical directorship, there will be developed district medical supervisors, who may come closely and quickly in contact with surgeons in the field attending the injured, and who may assist the employer as well as the employee in seeking only the best service of that kind."

As a logical outgrowth of the idea of an industrial accident service, a number of new industrial hospital enterprises have been planned during the past year. The most comprehensive one that has come to my attention is a hospital planned in Baltimore by five manufacturing establishments located not far from each other, each of which employs more than 5,000 persons. These concerns plan to construct cooperatively a hospital of 200 beds for their employees and the employees' families. There are to be no wards, all private rooms; in connection with the hospital is to be an elaborate dispensary for the workers and their families, a visiting nurse service, and a corps of social workers. In addition to these things, it was originally planned to have an auditorium for lectures, through which employees and their families might be educated to more healthful living.

The organization of an industrial hospital financed and controlled by a number of the labor unions was also proposed in New York. Some of the richest unions were considerably interested in the plan, and still have it under consideration.

#### Public Must Be Educated

On the other hand, employers are more and more beginning to realize the value of more scrupulously safeguarding and even cultivating the health of their employees. It is difficult, nevertheless, to convince many of this need. Before they will be convinced, they demand statistical evidence of the dollars and cents benefits to them. Unfortunately, complete evidence of this kind is impossible to obtain and partial evidence is very rare, and when existent, is often too closely guarded. Men of broad judgment and vision do not need such evidence. The logic of the proposition and such opinion as has been expressed by industrial leaders who have made the experiment are sufficient to convince them. Some of the most conservative manufacturing enterprises in

the country are "plunging" heavily in this sort of investment.

The funds now available to the Federal Government are far short of what they should be for a vigorous development of industrial health research. The present Congress did not think that there was sufficient need for the splendid service which the Division of Industrial Hygiene and Medicine was organizing, so it did not appropriate funds for the continuation of the work. The functions of this department were entirely taken up by the Public Health Service. All branch offices but the New York office, however, had to be given up because of lack of funds, and the work of advising industries desirous of improving the health conditions under which their workers labor, and of nation-wide educational work being planned, had to be abandoned. It is greatly to be hoped that funds may be found for this extremely important work.

#### What the Government Is Doing

The most comprehensive study of work being done in industrial plants which the government has published is *Public Health Bulletin No. 99*, entitled "Studies of the Medical and Surgical Care of Industrial Workers." This was prepared by Dr. C. D. Selby, as consulting hygienist to the United States Public Health Service. This pamphlet contains a very well worked out series of forms which may be used for the different phases of health work in factories and shops. It gives plans for plant dispensaries, hospitals, and examining rooms, and makes very many practical suggestions.

The United States Public Health Service has planned a very ambitious industrial program in spite of its lack of funds. It consists of the following proposals:

- (1) Continuing and extending health surveys in industry with a view of determining precisely the nature of health hazards and the measures needed to correct them.
- (2) Securing adequate reports of the prevalence of disease among employees and the sanitary conditions in industrial establishments and communities.
- (3) National development of adequate systems of medical and surgical supervision of employees in places of employment.
- (4) Establishment by the Public Health Service, in cooperation with the Department of Labor, of minimum standards of industrial hygiene and the prevention of occupational diseases.
- (5) Improvement of the sanitation of industrial communities by officers of the

Public Health Service, and cooperation with state and local health authorities and other agencies.

- (6) Medical and sanitary supervision by the Public Health Service of civil industrial establishments owned or operated by the Federal Government.

In commenting upon this program Dr. J. W. Schereschewsky, assistant surgeon-general of the United States Public Health Service, points out that "what we need is not so much an extension of Federal authority in health matters, as the development of a sense of responsibility for good health conditions in the people of the state and locality."

### Local Efforts in Health Work

So far as local health departments are concerned, the Department of Health of the City of New York, as far as the writer knows, has taken the farthest step in cooperating with local industries in the health interests of the workers. The following announcement appeared in the issue of the *Weekly Bulletin* of that department, dated December 6, 1919:

#### The Division of Industrial Hygiene Offers Special Services to Employers

The Department of Health announces that its Division of Industrial Hygiene is prepared to undertake a sanitary survey of factories, mercantile establishments, or office buildings, for the purpose of ascertaining any conditions which might impair the health of workers or prevent full return from services of employees. Establishments desiring these surveys will please communicate with the Superintendent of the Division of Industrial Hygiene, at 505 Pearl Street, Manhattan, who will make the necessary arrangements for such service.

Where a large group of employees is concerned, special clinics will be established for the purpose of making physical examinations, and those employees whose health is found to be affected will be advised and also will be visited in their homes to ascertain if conditions there affect their health or efficiency adversely.

The surveys will be complete in all respects as relating to the industries concerned, and on their completion a special report will be made.

In addition to the making of such surveys, the superintendent of the Division of Industrial Hygiene is anxious to confer with those interested, by letter, telephone, or personal appointment, for the purpose of giving any needed advice, as regards sanitary industrial standards, and measures for the prevention of occupational diseases.

### Progress in Industrial Nursing

Industrial nursing, as well as the practice of medicine in industry, has taken very considerable strides. The experience in Massachusetts has been extraordinary, when considered in the light of the progress of the past. Under the heading of "Progress Made in Industrial Nursing in 1919," Mrs. Anna M. Staebler, R.N., executive

secretary, Massachusetts Committee on Health in Industry of the Boston Association for the Relief and Control of Tuberculosis and Massachusetts Tuberculosis League, writes:

There has been a marked increase during 1919 in the number of industrial nurses employed in Massachusetts. This increase is due to an awakening on the part of the employer, because he knows that the supervision of the health of his employees counts for economy. The number of industrial nurses has been increased by approximately fifty-five during the past year.

Our Association has recently been asked to appoint a representative to act on the Industrial Committee of the National Organization for Public Health Nursing and to send a representative to the annual meeting to be held in Atlanta, in April, in order to help in the organization of an Industrial Nursing Division of the National Organization.

### Legal Advances in 1919

A very careful review of changes in workingmen's compensation laws, and in progress along the lines of health insurance is presented in the *American Labor Legislation Review* for December, 1919, published by the American Association for Labor Legislation. This summarizes the subject under the title of "Social Insurance" as follows:

Employers' liability laws were extended in three states, and the solicitation of claims was prohibited in Oregon. Four new workmen's compensation acts were passed, that of North Dakota being compulsory and those of Alabama, Missouri, and Tennessee being elective. Only six southern states are now within this type of legislation. In more than thirty states and Congress existing compensation acts were amended, in most cases extending the scope of the act, increasing the scale of indemnity, reducing the waiting period, extending the provisions for medical care, making special arrangement for compensation for second injuries, or bringing private casualty companies doing workmen's compensation business under more careful control.

Fourteen American compensation laws are now compulsory. Eight, including the new acts in Missouri and North Dakota, base compensation on 66 2/3 per cent of wages, four on 65 per cent, ten on 60 per cent, and four on 55 per cent. Connecticut and Wisconsin extended their laws to cover occupational disease. Kansas, Missouri and Ohio permitted blind persons to waive claims to compensation for injuries caused by their blindness, and Minnesota made it illegal to discriminate in insurance rates against the handicapped. Eight states made provision for vocational rehabilitation of industrial cripples, including acceptance in some cases of the terms of the federal law enacted this year authorizing government aid to states conforming to certain standards. The governor of Arkansas was authorized to appoint a commission to draft workmen's compensation legislation. Pennsylvania provided for printing the report of the health insurance commission. Old age pension systems for public employees were authorized in California, Connecticut, Maine, and Minnesota, and existing provisions were amended in Massachusetts and in one or two other states. California and Oregon urged Congress to pass the federal employees' pension bill, and Wisconsin established a commission to

study pension systems and make recommendations. Indiana created a commission to investigate "child welfare and social insurance," and report, with bills, to the next legislature. Oregon urged returning soldiers and sailors to keep up their war risk insurance.

The publication previously quoted sums up legislation along the lines of "Safety and Health" in the following extract: .

Congress through the taxing power set a minimum age of fourteen for the employment of children in factories, and sixteen in mines and quarries. More than a dozen states adopted laws prohibiting the employment of children in certain occupations as in mining (New Jersey and North Dakota), or raising the minimum age, educational, or physical requirements for children in general, factory, or mercantile occupations (California, Missouri, Montana, North Carolina, Porto Rico, West Virginia). Provisions for physical examination of children and issuance of employment certificates were strengthened in nine states. New York restricted the employment of women on local traction lines and on elevators, and Ohio forbade their working at certain hazardous employments, such as railroading and lifting weights of more than twenty-five pounds. Missouri prohibited industrial employment of women for three weeks before and three weeks after childbirth. California empowered the industrial accident commission to forbid the use of unguarded machinery or unsafe workplaces. Provisions for shower baths, wash rooms, drinking fountains, and the like, were adopted or amended in six states, and the same is true of rules for fire protection in four states. Connecticut required employers to furnish devices for threading shuttles to avoid use of the operatives' lips or mouths, and Indiana required gas masks in workplaces where dangerous fumes are present. Removal of coke fumes was ordered in Ohio, which also adopted a factory lighting code.

Existing factory and mercantile inspection statutes were extended in half a dozen states, and Nevada enacted a general shop safety law. Minnesota and Missouri strengthened their accident reporting laws. About a dozen states amended their mine inspection statutes or provided for mine rescue work. Michigan and Ohio dealt with warming vestibules or the height of couplers on interurban lines, while North Dakota enacted a railroad full crew law and required shelters for repair work. Bunks, baths, and other conveniences were specified for labor camps in California, six states provided for safe construction, maintenance, and operation of boilers, and five states established safety standards for building construction. Electrical installation was regulated in Oregon. Alabama permitted the employment of boys under fourteen as pages and messengers in the legislature.

### Bitter Controversy Over Health Insurance

Perhaps the most important legal phase of industrial health progress during the past year has centered around the battle in a number of states over health insurance. Backed by powerful propaganda supported by the commercial insurance companies a great majority of the rank and file of the medical profession has stood solidly against the proposed legislation. Their great fear has been financial loss, based upon the early experience in Great Britain. The opponents of Health Insurance seem to have lost sight of the final

report of the Committee of the British Medical Association which showed that, upon the whole, Health Insurance had increased the income of the British practitioner.

The most appealing argument used against Health Insurance laws is that they would "socialize" the profession. This appeal has created a terrible frenzy within the past year among groups of American physicians to whom the subject cannot be mentioned without a violent outburst. A fair sample of this feeling is expressed by Dr. William P. Cunningham of New York in an issue of the *New York Medical Journal* early last year.

"Thus it is," decries Dr. Cunningham in describing the attitude of some of the leaders who favor Health Insurance, "that we have the amazing spectacle of our Rockefellers and our Lamberts and our Goldwaters striving with the infatuation of the veriest soap box orators to advance the standard of the red flag internationalism. In so far as they can, they urge the adoption of certain specious features of the abhorrent doctrine under the pretense of ameliorating the condition of the masses. As class conscious as the wildest social revolutionists they would legislate for the 'laboring class.' \* \* \* The defeat of the insidious Socialistic infiltration is the greatest duty of the thinking man today."

The case for or against Health Insurance need not be stated here; it is sufficient to point out the intensity of feeling over the subject and the rather unbridled manner of expression of it which has lately developed.

The work has been given a very important stimulus by the entrance of two new publications into this field. *Modern Medicine*, printed by the publishers of THE MODERN HOSPITAL, appeared last April, and *The Journal of Industrial Hygiene*, published by The MacMillan Company, was presented to the public in May. There have also been a number of new books published covering various phases of the subject. *Bulletin No. 36* of the Russell Sage Foundation, published in August, contains a selected bibliography on the subject of "Industrial Hygiene."

Col. Harry E. Mock, president of the American Association of Industrial Physicians and Surgeons, sounded the inspirational keynote of the movement in his opening address at the annual meeting of the Association at Atlantic City last June. He declared that the time had come, if we are to build a true democracy for industrial leaders, to lay aside the selfishness and ruthlessness which has to a large extent typified the development of industry in the past, and to assume a new attitude of consideration and responsibility for the welfare of industrial workers.

## PROGRESS IN MENTAL HYGIENE, 1919

By FRANKWOOD E. WILLIAMS, M.D., ASSOCIATE MEDICAL DIRECTOR, THE NATIONAL COMMITTEE FOR MENTAL HYGIENE

WHEN the first hospital for mental disease was opened in this country early in the nineteenth century admission to it was as unincumbered with formality as admission to any other hospital. This is a fact apparently not generally known. Admission to these hospitals remained more or less informal for a period of almost fifty years when through a variety of circumstances confidence was replaced by distrust

and there was gradually built around the hospitals restriction after restriction until at the end of twenty years it was much easier to be admitted to jail than to a hospital for mental disease. These restrictions so handicapped the hospitals that constructive work became almost impossible. If hospitals for tuberculosis, for example, were permitted to admit for treatment only patients in the chronic stages of the disease, they would soon be able to do little more than provide custodial care. In mental disease, as in other diseases, hope lies with the acute patient, or, better still, with the patient in the prodromal stage and a hospital that is barred from receiving patients in these early stages cannot render a maximum service in the treatment of disease. But these restrictive laws spread from state to state until the doors of practically every mental hospital in the country was barred to those patients who, from a treatment standpoint, needed them most.

The pendulum started swinging again in 1882, and since that time many states, notably Massachusetts and New York, have largely rewritten their insanity laws, again giving patients access to the hospitals at a time when something of accomplishment may be hoped for. But progress in the field of mental hygiene must still be measured in part, unfortunately, in the increase in tools and facilities for work—hospitals and the accessibility of hospitals. The psychiatrist counts as important ground gained any definite steps taken to substitute for those restrictive laws, laws that reflect present-day knowledge of

*Progress in mental hygiene, handicapped for many years by restrictive commitment laws in the case of psychoses patients, and by lack of commitment laws in the case of the feeble-minded, has been stimulated through the war. The development of the neuro-psychiatric service of the army proved psychiatry a pragmatic and dynamic science. Public interest has manifested itself in the establishment of psychopathic hospitals, institutions for the feeble-minded, out-patient neuro-psychiatric clinics, societies for mental hygiene, and divisions of mental hygiene in the Departments of Health of two states.*

the nature of mental disease and that provide adequate facilities for treatment in the light of this knowledge. No account of the progress of a year would be complete that did not record these changes.

### Legislation

In a number of states in which legislatures have recently met important changes in the insanity laws have been made. In Indiana, Oregon, Maine, New Jersey, Kansas, and Tennessee, it has been made possible for a citizen desiring treatment to be admitted to a hospital voluntarily with no more formality than the signing of a paper asking for admission. Massachusetts was the first state to open the doors of its hospitals to voluntary patients. The Massachusetts law was passed in 1882 and in the past thirty-seven years has proved to be most useful. A law providing for temporary care for observation has likewise been found useful. Physicians and friends of patients are frequently puzzled as to the real nature of a patient's symptoms and the best course to pursue under the circumstances. They are not ready to swear before a court that the patient is "insane" and ask that he be "committed," but they do desire the advice of experts that might come as the result of a temporary period of observations in a hospital. Formerly such procedure was denied them and not until the patient's disease had progressed sufficiently to warrant his being called "insane" and clearly "committable" could hospital treatment be obtained. Massachusetts enacted a law in 1909 that provides temporary care for such patients on the application of physicians and others and without the formality of court procedure. Other states have made similar provision from time to time. At the last legislative sessions such provision was made in Indiana, Maine, and Tennessee. The Mississippi Legislature now has before it a bill presented by the Mississippi Mental Hygiene Commission which substitutes for the present insanity law a modern law carrying provision for

both voluntary and temporary care. This bill, which is a long step forward, has received the informal approval of the retiring governor and of the new one who was recently elected.

The most important hospital established during the year has probably been the new Psychopathic Hospital at Iowa City. This hospital is organized as a part of the medical department of the University of Iowa and will offer not only facilities

ing a psychopathic hospital in Indianapolis. Construction has begun on a new state hospital in New York—the first in twenty years. Two new state hospitals are being completed in Pennsylvania, and one additional hospital has been opened in Illinois. Two new hospitals have been authorized in Texas, and one additional hospital in West Virginia. Increased interest in the treatment of patients with mental disease is shown in



St. Rita's Hospital, Lima, Ohio, is a general hospital with a bed capacity of ninety-five, which opened last year. Meyer J. Sturm, Chicago, Architect.

for treatment but facilities for teaching and research.

The legislature of Colorado has authorized a psychopathic hospital for Denver, to be built as a part of the University of Colorado. A bill authorizing the construction of a psychopathic hospital in San Francisco, passed by the California Legislature, was vetoed by the governor. It is likely that a bill will be introduced at the next session of the Indiana Legislature, authoriz-

ing a number of other states. The National Committee for Mental Hygiene is at the present time conducting surveys in New Jersey, Missouri, and North Carolina, and in response to joint resolutions of the legislatures, invitations of governors or official bodies will undertake surveys during the year in Oregon, Washington, Idaho, Louisiana, and Rhode Island.

The facilities of the country for the care of nervous and mental patients have been further in-

creased by the provisions made by the medical department of the Army and the United States Public Health Service. The Army maintains its neuro-psychiatric wards at five general hospitals—Walter Reed Hospital, Washington, D. C., Fort McPherson, Atlanta, Fort Sheridan, Chicago, Fort Sam Houston, Texas, The Letterman Hospital, San Francisco. The Public Health Service has established hospitals for mental patients at Dansville, N. Y., Park View, Hoboken, Pennsylvania, Norfolk and West Roxbury, the latter in Massachusetts, and hospitals for neuroses at Waukesha, Wis., and Cape May, N. J. Other hospitals for nervous and mental patients will be opened by the Public Health Service in the next few months.

### The Feeble-minded

Whereas the treatment of patients with psychoses has been handicapped by restrictive commitment laws, progress in the care of the feeble-minded has been handicapped through lack of commitment laws. Recent social studies have shown the disproportionate part played by the feeble-minded in the causation of these problems and it has become clear that adequate supervision of the feeble-minded is necessary as a social as well as a humanitarian measure. The difficulty has been and still is, for that matter, the lack of institutions in which to care for the feeble-minded—some states have made no provision, no state has made adequate provision—and the lack of authority to retain a feeble-minded person in an institution should relatives or friends desire his discharge. As institutions and the authority of a commitment are essential in this matter, it is important to record that new institutions have been established or authorized in California, Indiana, Ohio, Kentucky, Wisconsin, Kansas, Florida, Minnesota, Louisiana, Texas, Delaware, Pennsylvania, South Carolina, Georgia, Alabama, and Arkansas, and that commitment laws have been passed in New York, California, Kentucky, Vermont, Kansas, Iowa, Montana, Delaware, Florida, Georgia, and Alabama. A commitment law is now before the Mississippi Legislature, presented by the Mississippi Mental Hygiene Commission and favorably mentioned by the governor in his inaugural address. Increased facilities, by additions to established institutions, have been provided in Illinois, Ohio, New York, and Maine. Progress has been made in the construction of the third school for the feeble-minded in Massachusetts, authorized in 1915. The National Committee for Mental Hygiene has recently completed surveys in Georgia, Alabama, and Missis-

issippi, and during the year will undertake surveys in Wisconsin, Missouri, and Maryland.

Probably the most comprehensive piece of legislation in regard to the feeble-minded is the new mental deficiency law enacted by the New York Legislature. This law provides for a state commission for mental defectives, uniform commitment, voluntary admission, emergency care and parole of the feeble-minded. Another important law enacted by a recent New York Legislature is the Lockwood law requiring the formation of ungraded classes in the public schools of all cities and school districts in which there are ten or more children three years or more retarded. Other significant legislation in this field has been important additional provisions to the Children's Codes in Missouri and Pennsylvania providing more adequate provision for unusual types of children; provision for mental examination of children in the juvenile courts in Iowa and North Carolina; the establishment of free mental clinics in Indiana and Massachusetts; and provision for the registration of the feeble-minded in Massachusetts.

### Out-Patient Clinics

One of the most significant recent developments in the field of mental hygiene has been the rapid increase in the number of community out-patient clinics in the country. A survey made in 1914 listed twenty-six clinics, and these mostly in New York and Massachusetts. A survey just completed by the National Committee for Mental Hygiene records 214 neuro-psychiatric clinics. The only states at the present time that have no community clinics of this type are New Hampshire, Vermont, Delaware, South Dakota, Wyoming, New Mexico, Arizona, Nevada, Idaho, and Oregon. Many of these clinics have been established by state hospitals for the benefit of discharged or paroled patients who may come to them for advice, for the benefit of parents or school teachers who have to deal with unusual types of children, physicians who desire advice in regard to the diagnosis and treatment of patients, social agencies, and courts. Other clinics have been organized by chapters of the American Red Cross to assist them both in their soldier and civil problem, by social agencies, neurological hospitals and general hospitals. These clinics make expert advice accessible to all in the community who may need it, and it would be difficult to overestimate their importance.

Previous to 1917 there were few social workers trained in psychiatric work. The need for psychiatric social workers became so great during the war that an emergency course was estab-

lished at Smith College. Other courses were later organized in Philadelphia and New York. These workers are trained not only in social work, but are given in addition such instruction in psychiatry as will give them an intelligent understanding of the problems with which the psychiatrist has to deal, in order that they may be of assistance to him both in gathering social and personal information that will be helpful in giving a clearer understanding of the case, and in assisting the patient in making necessary readjustments under the guidance of the physician. The addition of these workers to the personnel both of mental hygiene and of social work has been distinctly helpful. At the present time the demand for these workers far exceeds the supply.

Coordinate with the movement to prepare specially trained psychiatric social workers has been a movement to provide more adequate instruction in social psychiatry for all social workers. The most significant advance in this respect has been the establishment of a Department of Mental Hygiene in the New York School of Social Work, with at least one course in mental hygiene required for graduation.

#### Uniform Statistics

Strange as it may seem, there is little reliable statistical information concerning the prevalence of mental disease in this country, due to the fact that until recently there has been no uniformity in classification or in recording data with reference to patients in hospitals for mental disease in the several states. Work in this special field was begun in February, 1918, by the National Committee for Mental Hygiene through its Bureau of Statistics. A new classification of mental diseases and an outline of a statistical system was submitted to the superintendents of hospitals caring for mental patients. Later, a manual was prepared containing definitions and suggestions for diagnosis and directions for the preparation of annual statistics. The manual and tabular forms for the compilation of annual statistics have been supplied without charge to all cooperating hospitals. Statistical record cards, to be kept on file at the hospitals, have been designed with especial reference to the tables and are being furnished to hospitals at cost.

At the present time 145 of the 156 state hospitals in this country have indicated their intention to join in the movement, as have also a number of other public institutions and private hospitals for mental patients. Reports that have been received in accordance with the uniform statistical system show marked improvement over former ones, and make it possible to use the data

which they contain for comparative purposes. The system calls for special study of the new cases of mental diseases which are, after all, the only basis for determining the incidence of mental disease.

#### Societies for Mental Hygiene

Progress in mental hygiene does not come spontaneously, but, like progress in all other fields, comes as the result of organized effort. It is encouraging, therefore, to be able to record not only an increase in the number of organized mental hygiene societies, but an increased activity among the older societies. Societies for mental hygiene are now organized in twenty states. New societies have recently been formed in Maine, Georgia, Alabama, Mississippi, Tennessee, Kansas, and Oregon. The development of the work of state societies is shown by the employment of medical directors by the organizations in Connecticut, Massachusetts, Illinois, Pennsylvania, Maryland, and New York. These organizations are doing a valuable work in education, in the development of community clinics, in the care of discharged and paroled patients, in assistance to the Home Service Section of the American Red Cross and the United States Public Health Service in the care of discharged soldiers, in assistance to the public schools in dealing with unusual children, and to the courts, and social agencies.

The formation of the Canadian National Committee for Mental Hygiene marks a further growth in the mental hygiene movement. This organization has been of distinct helpfulness to the Dominion Government in providing care for the discharged Canadian soldier, and to the provincial governments in surveys of the care of the insane and feeble-minded it has made throughout Canada. The Committee publishes a quarterly *Journal of Mental Hygiene*.

#### Public Health Organization

As a result of the neuro-psychiatric examinations in the Army, over 70,000 men were found unfit for military service. As these men, as well as those who developed neuroses and psychoses in service abroad, now have rights as governmental beneficiaries, the problem of the Public Health Service in the care of discharged soldiers becomes a large one. To assist the Service in its handling of this problem, consultant psychiatrists have been appointed in the various public health districts. Similar consultants have been appointed by a number of divisional headquarters of the Red Cross. By these appointments, expert advice is assured in a problem that might otherwise easily have got out of hand.

Probably the most significant development in official public health organization is the establishment during the year of a Division of Mental Hygiene in the Department of Health of the State of Connecticut, and a similar division in the Department of Health of the city of Newark, N. J. Connecticut is the first state to create such a division in its official health department, and Newark is the first city.

The years 1917 and 1918 saw the development of the neuro-psychiatric service in the Army. The effective work both at home and abroad of this

division of the Medical Department brought forcibly to the attention of the country the fact that psychiatry today is no longer a static thing but a dynamic and pragmatic thing. The year 1919 has seen the demobilization of the neuro-psychiatric service of the army and the return of these medical officers to civil problems. In place of the former indifference, the returned psychiatrist is finding an increased public interest in and understanding and appreciation of his work. Were there nothing else to record, the year would have meant much in the history of mental hygiene.

## PROGRESS IN OUT-PATIENT SERVICE DURING 1919

By MICHAEL M. DAVIS, JR., Ph.D., DIRECTOR, BOSTON DISPENSARY

THE great war, with its infinite evils, has brought stimulation and progress to more than one branch of human endeavor. Medical science has been advanced by it and medical organization also. Thousands of physicians have become familiar with the work of hospitals and dispensaries who previous to the war were familiar only with private practice. Upon the dispensary the effect of the war has been like that of a series of electric lights which nursery gardeners put over their beds to stimulate the growth of the young plants. The war has been a forcing process for dispensaries in the United States, besides causing the establishment of large numbers of dispensaries in connection with military and relief work abroad.

Nineteen hundred nineteen, the year after the war, has given us time to notice and appraise some of these developments. Most striking has been the advance in the number of clinics or dispensaries treating syphilis and gonorrhea. Early in 1919 the United States Public Health Service published a list of venereal clinics in the United States, numbering then 302. This number was about twice as large as that recorded by the Committee on Out-Patient Work of the American Hospital Association in 1917, a growth of 100 per cent in two years. At the close of 1919 the United States Public Health Service has a list of 499 clinics in forty-six states, as follows:

Alabama .....	13
Arkansas .....	3
California .....	30
Connecticut .....	6
Colorado .....	6
Delaware .....	2
District of Columbia.....	1
Florida .....	9
Georgia .....	8
Illinois .....	25

Indiana .....	17
Iowa .....	6
Kansas .....	4
Kentucky .....	11
Louisiana .....	4
Maine .....	7
Maryland .....	8
Massachusetts .....	16
Michigan .....	12
Minnesota .....	5
Mississippi .....	6
Missouri .....	4
Montana .....	2
Nebraska .....	7
New Hampshire .....	2
New Jersey .....	11
New York .....	68
North Carolina .....	10
North Dakota .....	2
Ohio .....	26
Oklahoma .....	9
Oregon .....	1
Pennsylvania .....	100
Rhode Island .....	6
South Carolina .....	8
South Dakota .....	2
Tennessee .....	1
Texas .....	7
Utah .....	3
Vermont .....	1
Virginia .....	10
Washington .....	4
West Virginia .....	8
Wisconsin .....	8

Assistant Surgeon General C. C. Pierce, in charge of the Venereal Disease Division of the United States Public Health Service, writes:

"The most encouraging feature of the work is that with but very few exceptions, all clinics that have been established are still in existence and the number is increasing month by month. It might have been expected that, in carrying on an intensive campaign to interest as many as possible in venereal disease control work, local enthusiasts

would have caused clinics to be opened which would soon fail on account of lack of financial support or insufficient clientele. This has not, however, occurred."

Reports showing the number of patients treated during the year ending June 30, 1919 came in from 167 clinics. The total number of persons treated was 64,164. The total number of treatments given was 527,392. The clinics varied in size from small ones giving one thousand or so treatments in a year to very large clinics, indeed. One institution alone reported over 60,000 treatments, or more than 10 per cent of the total in these 167 clinics.

The venereal disease clinics are part of a national program. The administration of some is under federal, state or municipal authority. Many others are supported by private funds or maintained as special clinics in general out-patient departments or dispensaries treating all kinds of diseases. A rapid process of standardization is going on among venereal clinics, under the State Departments of Health, the United States Public Health Service, and the stimulus of private organizations such as the American Social Hygiene Association.

Child Welfare is another field of public interest largely promoted by the war, and has led to the establishment of many clinics for children. Some of these have been for the diagnosis and treatment of babies and young children, others for educational and preventive purposes only.

The twelve months beginning April 6, 1918, was designated as Children's Year and was a patriotic appeal for safeguarding children during the war. The results of Children's Year have been clearly stated in the last annual report of the Chief of the Children's Bureau, as follows: "It is obviously impossible to estimate the exact results of Children's Year. The result of the effort to save the lives of 100,000 babies cannot be known, even partially, at this time. What is certain is that the activities set in motion by that effort form a great, permanent and growing protection for infant life and will in time reduce our child deaths by many more than 100,000 annually. Millions of adults in this country have learned through the weighing and measuring tests alone that weight in relation to height and age gives a rough index to normal development; that hundreds of thousands of children are undernourished and suffering from other defects which are preventable or remediable; that child welfare is, in short, an important national problem."

Large numbers of the examinations made during Children's Year were performed at clinics. In California, for example, seventeen per-

manent county health centers were established for the child welfare, medical, and health work as a result of the examinations of over 40,000 children made by the physicians of the state.

Before the announcement of the Children's Year Campaign, seven states had child hygiene divisions. During 1918 five additional states provided child hygiene divisions; and during 1919 eighteen additional states have secured such divisions, making the present total of thirty states having child hygiene divisions. These child hygiene divisions will lead, and many have already led, to the establishment of many new children's clinics and babies' welfare stations. A report rendered by the Federal Children's Bureau says:

New public health nurses and children's health centers have been reported from twenty-four states, with 137 nurses in ten of these states and 134 health centers where mothers may be given advice and instruction concerning the care of their children. Other centers for child welfare work, such as prenatal clinics, nutritional clinics, and milk depots, are logically developing around these health centers.

In still another branch of work we see large development. The National Committee for Mental Hygiene has just completed a study of the clinics for diagnosing and treating nervous and mental disorders. In 1914 this Committee had on record only twenty-six mental clinics in the United States. The survey recently completed shows 214 "organized neuro-psychiatric clinics, and about a dozen state and private hospitals, not having clinics, have agreed to treat discharged service men suffering from nervous and mental diseases. The increase in the number of clinics may be attributed to the increasing popular and official interest and realization of the importance of the mental hygiene problem, due partly to the increase of nervous and mental diseases incident to the war, not only the neuroses and psychoses in the soldier who has been at the front, but in those who have labored under the stress and strain incident to the war. The apparent increase of mental deficiency is due to the more accurate means of mental testing and the instituting of clinics in schools, courts and penal institutions.

"Many of the clinics have a highly organized social service department—an essential part of the clinic and a thing that has been given due consideration only within the past five years."<sup>1</sup>

Another development of much interest during the year was the announcement of a peace-time program of the National Red Cross. The development of health centers is one of the important features of the program and will undoubtedly prove a powerful stimulus to new dispensaries

<sup>1</sup>Quoted from private letter received from Dr. C. J. Dalton of the National Committee of Mental Hygiene.

and clinics of many types and to the better coordination of those already in existence. Noteworthy, also, during 1919 was the completion of a study of dispensaries in New York City, made by the Public Health Committee of the New York Academy of Medicine. Some results from this are likely to be apparent before the close of 1920. The survey revealed the amazing bulk of dispensary work in the metropolis, nearly one million and one-quarter persons being recorded as treated by 150 odd dispensaries of New York City during the course of the year. Towards the close of the year the American Hospital Association established a Service Bureau on the Dispensary and the Community Relations of Hospitals. The United States

Public Health Service, which is charged with the responsibility for providing medical care for the five million beneficiaries of Uncle Sam's War Risk Insurance, has announced its intention of developing dispensary facilities to supplement the treatment now provided in hospitals under the charge of, or in cooperation with, the Public Health Service. The year 1920 thus opens with several important national organizations directly interested in dispensaries. The war upset the routine work of many well established dispensaries, but developed many more new ones than it upset. The period upon which we are now entering may be expected to manifest larger developments in the dispensary field than ever before.

## DEVELOPMENTS IN DIETETICS DURING THE YEAR 1919

BY LULU GRAVES, HOME ECONOMICS DEPARTMENT, CORNELL UNIVERSITY, ITHACA, N. Y.

THE subject of nutrition and dietetics continues to hold a prominent place in the economic world, and the knowledge acquired the last few years continues, in a large measure, to be applied to a more intelligent manner of living and more rational dietary habits. Although conservation and other restrictions brought about by war conditions have been much modified, the lessons in health which were learned in this relation have not been so soon forgotten. As health depends to such an extent upon proper nutrition, and as both physical and mental efficiency depend so much upon health, this subject should be of vital interest to everyone.

Hospitals have for some time been progressing, slowly, to be sure, but none the less steadily, in this phase of medical therapeutics. Not until recently, however, has there been so much development along these lines in social welfare and industrial work.

Nutrition clinics or food clinics are being opened in a number of cities in connection with hospitals, dispensaries, and health departments. In those clinics which have developed sufficiently, or where the finances will permit it, a dietitian is included on the staff; in others this work is done

*The relation of nutrition and dietetics to health and efficiency is being more and more realized today. The work of the dietitian is being extended into the home as well as the hospital. The industrial world is also recognizing the value of the woman trained in dietetics.*

*These urgent calls for trained women necessitate a more extensive system of home economics training in our colleges, medical schools, and hospitals.*

*The recent war opened up a new field of dietetics, that of dietitian service in the army, which proved an important phase of the work.*

by nurses. Many of the courses in welfare work which have been offered have included a limited amount of instruction in food and dietetics, and, as a result, dietitians are being called upon to teach classes, act as consultants, or help in other ways.

Reports from various organizations in which the nutrition clinics are already established have been given in the department of "Dietetics and Institutional Food Service" of THE MODERN HOSPITAL during the past year, including articles by Miss Lucy Gillette of the Dietetic Bureau, Boston; Miss Bertha Wood of the Food Clinic, Boston Dispensary; Miss Emma Winslow of the Charity Organization, New York City; Mrs. Mary L. Schapiro of the United Hebrew Charities, New York City; Miss Blanch M. Joseph of the Michael Reese Dispensary, Chicago; and Miss Nellie Sargent of the Wade Day Nursery, Cleveland.

Health Schools are being held in many states through the extension service of state colleges and universities, or in conjunction with the state department of health. In all of these the subjects of nutrition and dietetics are the prominent features.

In a paper read before the American Dietetic

Association in Cincinnati, Dr. William Walsh of the United States Public Health Service says: "While the medical experts can diagnose disease and direct remedial measures, the follow-up and practical execution of the dietetic measures indicated in remedial disorders can best be executed by women trained in nutrition, in cooperation with the interested women of the community. They are splendidly equipped to impart instruction in the elements of nutrition and meal planning to women and children, to educate mothers in the principles of infant feeding, and, in general, conduct an educational campaign in these matters so vital to the health and well-being of the community. They will, for instance, stimulate an interest in the health of children by tabulating increases in weight and give detailed directions for checking improper feeding."

Thus the work of the dietitian is being extended into the home. For a long time she was known only in the hospital. From the standpoint of the hospital, her work there is an important one, for the recovery of a patient from any ailment will be facilitated by food which is properly selected, properly cooked, and properly digested and assimilated, while in many instances the recovery of the patient depends almost entirely upon dietary consideration. From the standpoint of the individual, however, time spent in the hospital is comparatively short, and it is essential that intelligent supervision of the diet be extended into the home.

#### The Dietitian in Industry

The industrial world, too, is recognizing the value of the woman trained in food and dietetics. A number of commercial firms are placing women trained in those subjects in charge of their lunch rooms and in their welfare departments. They find that it pays financially, as well as in other ways, for their employees to have an adequate luncheon. The manager of a large manufacturing plant recently made this statement: "Previous to the time when we established a well managed lunch room for our employees, we found that the lowest ebb of their output was between one and three o'clock in the afternoon. Since they have had the privilege of a warm and better selected luncheon, we find no difference in results at that time of day."

With such positive evidence of the effect of one meal on the day's work, there can be no question of the vast difference which may be made in the industrial world by the improvement of the other two meals each day, and the subsequent improvement in habits of living.

The United States Rubber Company put a dieti-

tian in charge of one of their lunch rooms in Naugatuck, Conn. The results were so gratifying that in less than three months she was given an advisory position in all three of their plants.

Two hotels have recently put women trained in home economics in charge of some part of their service, and others contemplate doing so as soon as women can be found for the places. Miss Harlean James and Miss Olive Davis have demonstrated in the government hotels at Washington, D. C., what can be done by the home economics woman in this line. Miss Rena Eckman is acting as buyer for the Foote Memorial Hospital, Jackson, Mich., and Miss Elva George is Supervisor of Buildings and Grounds at Barnard College, New York City. Both of these women are well known in hospital circles, Miss Eckman having been dietitian at Massachusetts General Hospital for some time and Miss George director of the Bureau of Dietitian Service in the Red Cross.

#### Need for Training Centers

With all these great and urgent needs for knowledge of food composition, nutrition, and dietetics, and particularly their relation to disease, we have also a need for some one to give accurate, reliable information about it. A few hospitals have helped very materially in offering to graduates in home economics a course in student dietitian training. Comparatively few hospitals are doing this, however, and as yet the training offered is, in most cases, meager and lacking in standards or system.

If the college, medical school, and hospital would unite in an effort to promote this training, it would be of great benefit to all of them, as well as to the general public, and both the medical man and the dietitian would be much better equipped for their work. In a small way, the hospital affords a connecting link between the other two institutions. It would seem desirable and logical for this to be developed into a strong educational work centered in the hospital.

A committee from the American Dietetic Association is now working with a committee from the American Home Economics Association on a course of training, especially for the dietitian, to be offered in colleges. Letters from this association are being sent to superintendents of hospitals for the purpose of finding out what may be done by hospitals to supplement the course suggested for the college. A survey has been made of hospitals offering student dietitian training, with the hope of getting some definite information about what is being done at present and to determine what can be done to make the student training more uniform.

Other activities of the association during the past year are:

(1) A committee is working with a representative from the Nurses' Association on the course in dietetics for nurses.

(2) Letters have been sent to the state Boards of Examiners for Nurses asking that dietitians be represented in the examination for dietetics. Many cordial replies have been received expressing a desire for this to be done, and in some states this action has already been taken.

(3) A mailing list of about 600 dietitians has been completed and is kept as nearly correct as

ies of all papers read at Cincinnati will be included in this bulletin as well as all business proceedings. Every one interested in any phase of dietetics should have a copy of this bulletin.

The field opening up for the consultant dietitian is too new to be discussed at this time, but a few medical men are demonstrating the advantages of an affiliation of this kind. The National Research Council has appointed a committee on nutrition. This committee is interested in the work of the dietitian and we anticipate some valuable suggestions as a result of its investigations.

The war recently ended is the first in which



The Tennessee Coal, Iron & Railway Company conducts a hospital at Fairfield, Ala., which was opened in 1919 for industrial patients. Gustav W. Drach, Cincinnati, Ohio, architect.

is possible. All dietitians are requested to notify the Association of changes of address.

(4) A sort of Clearing House is being developed in order to be of help to the hospital superintendent wanting information in regard to dietitians or dietary problems, and to the dietitian in learning of positions available. This is not yet established well enough to render the service we should like, but with the aid of superintendents and dietitians it soon may be. During the past year about 150 hospitals and other institutions have been supplied with dietitians through this organization.

(5) A list of publications dealing with questions of interest to dietitians has been compiled. We should be glad to know of new books, pamphlets, or bulletins, which should be added to this list, and we ask that every dietitian let us know of anything she has found helpful.

The annual meeting of the American Dietetic Association was held in Cincinnati last September and proved to be an inspiration to all who attended. The proceedings of this meeting are now being prepared for printing and we hope soon to have them ready for distribution. Complete cop-

ies of all papers read at Cincinnati will be included in this bulletin as well as all business proceedings. Every one interested in any phase of dietetics should have a copy of this bulletin. The field opening up for the consultant dietitian is too new to be discussed at this time, but a few medical men are demonstrating the advantages of an affiliation of this kind. The National Research Council has appointed a committee on nutrition. This committee is interested in the work of the dietitian and we anticipate some valuable suggestions as a result of its investigations. The war recently ended is the first in which the services of a dietitian have been known. It has been repeatedly stated that no army of the future would ever be formed without including the dietitian. This is sufficient evidence that she was able to fill her place in this great conflict. Dr. John R. Murlin, who was director of the Division of Food and Nutrition, Medical Department, U. S. Army, in his paper read at Cincinnati on "What We Have Learned in Dietetics From the Army" tells of some valuable data obtained through the attention given to the dietary departments of the army hospitals. This paper was published in the January, 1920, issue of THE MODERN HOSPITAL.

Miss Happer, supervising dietitian of the army, gives the following report:

"The dietitian service is a comparatively new branch of the Medical Department, U. S. Army. At the beginning of the war there were no dietitians attached to the army hospitals, but at the close of the fiscal year, June 30, 1918, there were 164 dietitians in the service. At the time of the signing of the armistice there were 356 dietitians, —84 overseas, and the remaining 272 distributed among the 97 base, general, and post hospitals.

"Up to date there have been 384 dietitians in the service. There were four deaths, two in this country, one in England, and one in France. Three dietitians received the British Medal, Member of the British Empire; two of the three mentioned and one other received the British Certificate of Merit.

When these women first arrived "over there" the British did not understand what a dietitian was, but you can see that the British appreciated them more than any other nation, at least they were the only nation to show their appreciation. At the present time there are 73 dietitians in the service, five of these having been reappointed. One new one has been appointed within the past few weeks and one more is to be appointed shortly. Within the last two months few hospitals were closed which furnished us any dietitians; hence the few appointments and reappointments.

"Early in November, 1918, a supervising dietitian was appointed and assigned to duty in the Surgeon General's office. Her duties include general supervision of the work of all dietitians, and she has charge of recruiting, assignment, transfer, and discipline of the dietitians; she also inspects the dietary departments of the army hospitals when necessary. At present this position is being put under the United States Civil Service Commission.

"At the beginning of the war the duties of the dietitians were not well defined. Regulations have since been made defining the duties and status of the dietitians, and providing for the appointment of head dietitians. The duties of the head dietitian are as follows:

"She is responsible for the planning of all patients' menus, but confers with the mess officer concerning market conditions before approving menus; reports to the chief nurse or ward surgeon deficiencies of service found in wards, in order that these may be corrected through proper channels; reports deficiencies of preparation and service found in mess hall and kitchen to the mess officer; inspects serving of food in all wards and has the responsibility of seeing that it is properly prepared; supervises and assigns the work of her assistants.

"The salary of the army dietitian is \$60 per month with maintenance. At present the dietitian is entitled to the \$240 bonus which has been granted to certain classes of civilians, and which is paid as a \$20 per month increase in compensation to those who remain in the service. It is necessary that the dietitian be recommended by the Commanding Officer of the hospital where she is stationed in order to receive the said bonus.

"The requirements of the army dietitian are as

follows: (1) An applicant to be eligible must have had at least a two-year course in home economics beyond High School grade; and this training shall have been supplemented by at least four months of practical experience in a general hospital (dietetic department). She must also be indorsed by the principal of the school from which she received her training, and the superintendent of the hospital where employed. Two other recommendations are required. (2) She should be



This new home for Columbia Hospital, Milwaukee, Wis., was opened last year. It cares for eighty patients. Richard E. Schmidt, Garden & Martin, Chicago, architects.

between the ages of twenty-five and thirty-five and physically able to stand the work."

Unfortunately we have not been able to get much definite information about the work of the dietitian overseas, although we know that it deserves a prominent place in this report.

Plans are well under way for the next annual meeting of the American Dietetic Association. At a meeting of the executive committee held in New York City, December 27, it was decided that the invitation be accepted to furnish the program for one session of the meeting to be held at Lake Placid in May. This meeting is for the purpose of organizing a Bureau of Institution Research and the American Dietetic Association will have a part in that organization.

The decision was also made at this meeting to have the Association represented at the meeting of Home Economics in Cleveland in February, and at the meeting of the American Hospital Association in Montreal in October.

We feel that a foundation has been laid this year for some good constructive work in the future. The attendance and enthusiasm at the annual meeting, and the interest which is still being shown by large numbers of dietitians give us confidence to believe that a solid structure will be built upon this foundation.

## A YEAR'S REVIEW OF DRUGS AND CHEMICALS

BY JOHN K. THUM, PH.M., PHARMACIST, THE LANKENAU HOSPITAL, PHILADELPHIA, PA.

**I**N a review of the past year, so far as it relates to drugs and chemicals, and particularly as these articles bear on hospital work, one finds it difficult to make any positive statements. It is said that from the beginning to the close of the war the average advance in prices of one hundred items of which a close record was kept amounted to 200 per cent. Since the close of the war there has been a slight gradual recession of prices in general, yet some articles for which there is much use in medicine have advanced to unprecedented prices.

Among such articles might be mentioned asafetida, or gum resin obtained by cutting the rhizomes and roots of *Ferula asafetida*, or other species of this plant. These plants are native of eastern Persia and western Afghanistan, and the main point of exportation is Herat. The fact that it comes from the other side of the world and that transportation charges are unusually high and will be for some time, accounts for its present high price; this coupled with the fact that the stocks of this drug that were imported before we got into the war have all been used up, makes any immediate drop in price unlikely. At the present time the price of this drug is in the neighborhood of \$6 per pound; before the war it could be bought for one-tenth that sum.

### Munitions Plants Consume Glycerin

It is a source of great satisfaction to have the price of glycerin recede to somewhere near its former prices. At the beginning of the war, and even long before our country became involved, glycerin commenced to soar in price. This substance is an important ingredient in the manufacture of some explosives. As the war went on, the demand for death-dealing devices increased enormously, and naturally this constituent of vegetable and animal oils and fats became more and more diverted from medicinal purposes. In some hospitals this substance had been used routinely in enemas; and at or near a dollar a pound, and sometimes more, the monthly bill for glycerin would have assumed almost gigantic proportions. Fortunately, common-sense ruled, as it was observed that in the great majority of cases the use of glycerin could be omitted in administering enemas to patients.

Phenol, or carbolic acid, as it is commonly called, at the outbreak of the war immediately began to soar in price. This country had for

many years obtained its supply from England and Germany. Hostilities were not long in operation when this source of supply was cut off. The former nation placed an embargo on phenol, and for reasons that are obvious Germany ceased sending this substance across the sea. She likewise placed an embargo on it. Carbolic is an important ingredient in the manufacture of trinitrophenol or picric acid, to mention it under a more familiar name. This is a powerful explosive. The war was not long in being before it became clear to observing people that it would be a long one, with all the resources of the combatants strained to the utmost. Such was the demand for this substance from the munition manufacturers that there was little left for surgical purposes, and it must be remembered that there was sore need of it for antiseptic and germicidal uses in connection with wounded soldiers. This restriction was really the main reason for the research that was undertaken at that time by army physicians for a cheap and efficient germicide, and the outcome was the famous Carrel-Dakin solution.

In the writer's recollection no pure carbolic acid was manufactured in the United States. This country placed no custom duty on it. It came in free; and the result was that while it was very low in price, duty-free carbolic acid prevented the development of the industry in this country. For various reasons we could not, under such circumstances, compete with foreign manufacturers of this really important compound. A short time after war was declared the price advanced from \$0.14 per pound to as high as \$1.50 and \$2 per pound. At the time of the signing of the armistice the development of this industry in this country had progressed to such an extent that it could be bought for \$0.60 per pound. In February, 1919, the price dropped to \$0.44 per pound; March of the same year to \$0.30; and in May it dropped to \$0.18. This latter price may have been due to the fact that at the time of the signing of the armistice the government had in its possession 30,000,000 pounds of phenol that had been manufactured by our own industries, and which it disposed of to the distributors of this substance in the spring. At the time of writing this paper the price is \$0.27 per pound, which may be regarded as a fair price. It is unlikely that this industry will continue to prosper without some tariff protection.

Opium, at the date of this writing, is listed at \$9.85 per pound; one year ago it was selling at \$33.15 per pound. Before the war it could be bought for as low as \$7.50 per pound. Notwithstanding the present low price of this important drug, morphine, which is obtained from it, still keeps very high, although lower than at the same time a year ago, it having dropped about 26 per cent.

A year ago atropine sulphate was selling for \$32.50 per ounce; to-day it is listed at \$18.25. During the war it reached remarkably high prices.

at one time selling for as much as \$60 per ounce.

In a brief paper such as this must necessarily be, it is impossible to mention the changes in price of the thousand and one things that a modern hospital pharmacy must carry in stock; neither is it essential. Viewing the present situation *en masse* it is fair to say that conditions are gradually improving. Rapidity of improvement depends on increased production. And, as a well-known financier said recently, this can only be hastened by the peoples of the world learning to "work and save" as they never have before.

## PROGRESS IN ERADICATION OF VENEREAL DISEASE DURING 1919

BY ALEC N. THOMSON, M.D., DIRECTOR, DEPARTMENT OF MEDICAL ACTIVITIES, THE AMERICAN SOCIAL HYGIENE ASSOCIATION, NEW YORK CITY

THE year 1919 has been one of marked progress in the general program for the eradication of venereal disease. New laws have been passed and others have become operative, making it essential for treatment to be taken, and, as a necessary corollary, to be provided. Facilities for treatment, however, have not kept pace with the requirements. This is true not only in the United States, but more or less throughout the world. A good many people think we are suffering from overlegislation. We are not suffering so much from overlegislation as we are suffering from lack of facilities to meet the requirements imposed.

Great progress has undoubtedly been made in depriving the incompetent physician and the charlatan of their victims. This has been accomplished by education. But there is no use in depriving the individual of his patent medicine or "quack" doctor without providing adequate facilities as a substitute.

Based upon the experience of the year, it would seem that sufficient stress has not been placed upon the need for educational work with physicians, dispensaries, and hospitals. The general scheme for venereal disease control is believed to be sound and has proved workable wherever given a thorough trial. While some of the measures applied to venereal disease are considered by many as experimental, they are not experiments in the true sense of the word, as they have been found practicable when applied to other communicable diseases. Success in the control of gonorrhea and syphilis will depend largely upon the thorough treatment of every case according to modern methods of procedure.

The United States Public Health Service has established a positive, workable *liaison* with state boards of health, and medical, dental, and allied schools and colleges, in addition to various associations and organizations, during the year 1919. Publicity has been a big feature in the year's work.

Approximately 100,000 placards calling attention to the danger of venereal disease were posted in railway coaches, Pullmans, and stations throughout the country. Educational pamphlets dealing with venereal disease and sex education, totaling about 14,000,000, have been issued by the Federal Government and various state and city health departments. This does not include some 2,000,000 pieces of educational material issued by the Public Health Service and the American Social Hygiene Association which were distributed by about 2,000 employers of labor.

The Public Health Service has obtained cooperation from all the states except Pennsylvania, Nevada, and the District of Columbia in the venereal disease campaign as required under the Chamberlain-Kahn Act (chapt. xvi, H.R. 12,281, effective July 1, 1918), which established a Division of Venereal Diseases of the Public Health Service.

One of the principal regulations established by the bureau in its cooperation with the state boards of health was that the state should require the reporting of venereal diseases. As with all new notification regulations, complete or reasonably complete reporting must be a development of the future. During the year very marked progress has been made, however, and

the tables show that from July 1, 1918, to September 30, 1919, 171,391 cases of gonorrhea and 128,751 cases of syphilis were reported throughout the United States.

How many hospitals have opened their doors to syphilis and gonorrhea during the past year is not known, although the barrier has undoubtedly been in part removed. It is significant that over 400 clinics are now in existence where treatment can be obtained by patients on a free, part pay, or pay basis.

### General Educational Work

In general educational work on the subject of venereal disease, various lines of attack have been developed, such as instructing high school teachers and principals; reaching the male youth of the country, which is composed of approximately 16,000,000 boys between the ages of fifteen and twenty-one; spreading the message among the rural population by special adaptation of the general publicity campaign; conducting a special campaign in fraternal organizations and societies; pledging over 50 per cent of the druggists throughout the country not to sell venereal disease nostrums; securing elimination of the advertising of so-called quack doctors and patent medicines through cooperation of the newspapers; and enlisting the active support of many national and local organizations of women's clubs, business associations, labor groups, and the like.

In the professional press of the country an unprecedented amount of space has been given to the general subject of the control, diagnosis, treatment, and prevention of venereal disease. This applies to the professions of medicine, dentistry, pharmacy, nursing, and public health.

### Cooperation of State Boards

If one thing more than another stands out in the work of the Public Health Service during the past year, it is that practically all state health officers have been brought heartily into the campaign. This work, of course, enabled the Public Health Service to pursue its most definitely defined functions, and the success which is accompanying the work of the various state boards of health and the cooperative spirit which they are manifesting toward each other and toward the Public Health Service is probably one of the most gratifying results of the campaign. It was no easy matter, with the well-known prerogatives, such as States' Rights, to bring forty-eight states into one general plan to fight venereal diseases. Different localities developed different problems, and the big task was to mold the Federal policy so that all states could reasonably conform.

One of the most important though less well known pieces of work the Public Health Service is doing is that concerned with the men in the American Merchant Marine. The Marine Hospital Service has always treated venereal disease and has for some time done a considerable amount of educational work among those seamen who come directly under their supervision. During the Spring of 1919 special effort was devoted to the control and prevention of venereal diseases through education and prophylaxis in addition to treatment. These men are situated in many ways like the soldiers and sailors were during the war, and their services have been equally valuable. They have been subject to exposure probably in a greater degree than any other one class, because they are constantly shifting from one port to another and have no means of continuing treatment at one clinic or hospital. The Public Health Service is undertaking to establish a competent venereal disease treatment center in all ports where these men may touch. Thus men who become infected in one port and apply for treatment there will be treated until the ship sails, whereupon they will be directed to the clinic at the next port of call where treatment can be obtained, and from there, in turn, they will be directed to the place of treatment at the next port. This plan, it is expected, will eventually cover the entire world and arrangements will be made so that the American Merchant Marine seaman will have the advantage of proper treatment, no matter where he is. This is possible. The Public Health Service has medical officers stationed throughout the world who will help to bring this about. Surgeons on many merchant marine vessels are being enlisted in the campaign and are being trained to give modern venereal disease treatment.

### Training Social Service Nurses

During the year 1919, under the auspices of the Public Health Service, there have been graduated several classes of nurses trained in social service as it peculiarly relates to the control of venereal disease. These nurses are being placed with state boards of health, hospitals, clinics, Merchant Marine hospitals, and the like, to do the necessary follow-up work required in the efficient and successful management of a medical service specializing in gonorrhea and syphilis.

The first of these classes to complete the course was that of sixteen Public Health nurses who graduated in November, 1919. This special course included instruction at Columbia University, at the Bellevue Hospital, and at the New York School of Social Work. This instruction included social service, covering particularly field

work outside the dispensary with the families of the patient, as well as the medical side of venereal disease control.

The campaign of public information was inaugurated on the belief that nothing can be sold to the American public, whether it be soap, soup, or social hygiene, unless ground is first broken by publicity methods. Once the public is interested in a subject in a general way, it is possible to go ahead and sell them some particular brand. All of the campaigns undertaken have, so far as possible, been pointed towards the final use of mass education methods.

In summarizing the national work done in 1919, it is necessary to bear in mind that up to April 1 the work was done by the section of men's work of the Commission on Training Camp Activities. The principal civilian organization now carrying on this work in cooperation with the Government is the Department of Public Information of the American Social Hygiene Association. The work of the Commission was mainly the cleaning up of communities in cantonment areas which permitted the operation of redlight districts. This was, of course, purely a war activity, the main purpose of which was to protect our soldiers from venereal diseases. First of all prominent citizens in the communities which were within a fifty-mile radius of all cantonments were circularized through a letter which described the work being done, and were asked for their cooperation. A surprising and most encouraging response was received. Clean-up campaigns were conducted in 500 communities. In some communities the work was carried out entirely by local organizations. In other communities the

publicity has hit hard at the redlight district. In community after community, these districts, the largest single source of venereal diseases, have been closed.

As the campaign developed in all its angles, industry became more and more interested, and, as the "Fit-to-Fight" slogan applied to the army, so did the "Fit-to-Work" slogan apply to industry. As a natural development, the venereal disease campaign was carried to all industries. By the summer of 1919, approximately 57,000 employers of labor had been reached, with the result that about 2,000,000 pieces of educational material were purchased for distribution among employees. Several hundred firms enlarged the scope of their medical services to include advice upon venereal disease, as well as diagnosis and treatment. Six of the nation's largest industries took up the work and developed the government plan in considerable detail. They made allotments for the work of venereal disease education and control just as they would for any other efficiency problem in the plant. Large venereal disease posters were prepared by their own staffs, and venereal disease pamphlets were translated into other languages for their foreign-speaking employees. The pamphlets were sent with the appeal to the employee to keep himself efficient, so that he would be fit not only for his own job but for that of the man above him.

The work of putting the message before as many groups as possible was continued throughout the year. General campaigns, modeled after the methods that were successful during the war, were carried on with certain state legislatures as well as professional and other groups.

Legislation on the subject of venereal disease control and prostitution was enacted or strengthened in three-fourths of the states during the 1919 session of the legislatures, largely as a result of the vigorous drive made by the Commissions on Training Camp Activities, the Interdepartmental Social Hygiene Board, and the United States Public Health Service. A bulletin entitled "Standard Forms of Laws" was issued and widely distributed. These laws included measures calling for the repression of prostitution in its many phases, the reporting of venereal diseases, and the providing of places of rehabilitation physically and mentally for delinquent women. Bills providing for appropriations for combating venereal disease have also been passed in about three-fourths of the states. The appropriations are those required under the Chamberlain-Kahn Act for the fiscal year ending June 30, 1920.

In some of the states representatives of the Law Enforcement Division of the Commission



Two new buildings have been erected and an existing residence remodeled at the Tulare-King's County Joint Tuberculosis Hospital, Springville, Cal., and were opened last year. Only tuberculous patients are received. There are forty-one beds in the additions. Miss Julia Morgan, San Francisco, Cal., architect.

Commission sent a representative to organize a committee and direct the campaign.

In these campaigns valuable ground for the venereal disease control movement has been won in every part of the country. Plain, practical

were stationed to urge enactment of suggested legislation; in other states this work was done by representatives of the Public Health Service. In states where no representatives of the Public Health Service or the Commission were stationed, the lawmakers were reached by correspondence from Washington.

Many states have passed rules and regulations prohibiting advertisements relating to the treatment of diseases of the generative organs, and prescribing penalties.

### Combating the Quack

Recognizing that newspaper advertisements of the so-called "quack" specialists for venereal diseases were one of the gravest obstacles in the campaign for the eradication of venereal disease, the United States Public Health Service sent a request to 20,000 advertising mediums in the country asking them to discontinue this class of advertising. Practically every one has agreed to do so. A large number of the newspapers have already found it good business to stop this class of advertising. It is now generally recognized that any "quack" advertisements appearing in print are an indication that the paper or journal carrying them is very much behind the times.

### Newspaper Campaign

"The newspapers will not touch it,"—in the early part of 1919 we heard that sort of remark pretty often.

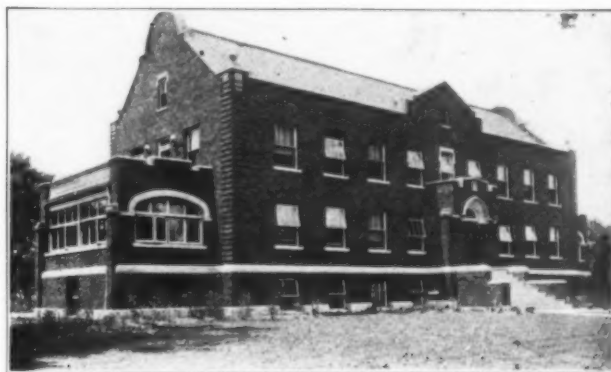
But the newspapers did touch it! They realized that the subject of venereal disease control in its various phases needed a bit of elucidation; they gave the public a lot of it during the past year, and it wants more!

Great dailies and country weeklies alike opened their columns to the subject. Maybe the public shivered and gasped, but it *read*—and there were no canceled subscriptions.

### Work With the Doctors

The United States Public Health Service, through its Bureau of Venereal Diseases, during 1919 communicated with approximately 140,000 physicians and surgeons throughout the country, inviting their attention to the prevalence of venereal diseases and the importance of an energetic program for their control. The response was extremely gratifying, and about 50 per cent of them replied, asking for additional information. This work of the Public Health Service was followed up and supplemented by most of the state health departments, not only through calling the attention of the medical profession to the reporting regulations, but also by special educational

work, including the distribution of a "Manual of Treatment of Venereal Diseases." There is no question that the physicians of the country during 1919 gave greater attention to venereal disease and recognized a very much larger number of



The Sarah A. Jarman Memorial Hospital, Tuscola, Ill., was begun in 1917 and completed last year. It takes all classes of patients, and has a bed capacity of twenty-eight.

cases than ever before; they also cured many cases that in previous years had been entirely neglected.

A campaign along publicity lines, putting the problem before the doctors in a new light and convincing them that the country at large was awake and interested in this particular situation, was carried on by the American Social Hygiene Association in the last quarter of the year 1919. It is well known that there is a percentage of doctors who do not treat these diseases and another percentage that regards them very lightly. Twenty-five thousand physicians, approximating the age group between thirty and forty years, were selected and sent a publicity letter outlining the American plan and enclosing a reply postal and a folder which especially emphasized the relation of the medical profession to venereal disease prevention. Over 20 per cent of the physicians replied, and as a result are in contact with advancement in venereal disease control. One of the results of this campaign will undoubtedly be the exercise of greater effort during 1920 to the end that every physician in the United States will receive more than one message from national organizations interested in the advancement of social, medical, legal, and recreational measures for the control and eradication of gonorrhea and syphilis.

On the foundation laid in 1919 there will undoubtedly be built an educational structure which, through the development of national publicity, will reach all groups and classes of people in the United States. Mass education is the foundation on which the final success of the campaign for combating venereal diseases must rest.

## THE HEALTH CENTER MOVEMENT IN THE UNITED STATES

BY JAMES A. TOBEY, ASSISTANT TO DIRECTOR, DEPARTMENT OF HEALTH SERVICE, AMERICAN RED CROSS, WASHINGTON, D. C.

THE following report contains in concise form the results of a study of the health center movement in the United States. The investigation has extended over four months beginning September 1, 1919. It is estimated that 75 per cent or more of all real health centers in this country are included and while there are undoubtedly some health centers not known to this department, the report may be considered as practically complete. For the purposes of this report a health center is defined as the physical headquarters of some productive form of co-ordination of the health agencies and activities in a community. Neither one clinic nor only one type of activity creates a health center, though, of course, it may be a commendable beginning for future expansion and development.

The chairman of the Central Committee of the American Red Cross sent out a letter to all state and provincial health executives in the middle of September, 1919. This letter outlined briefly the Red Cross public health policy and requested information as to existing health centers in the various states. A mimeographed copy of the Health Center pamphlet was enclosed. In the middle of October, 1919, the assistant to the chairman sent another letter to the same parties enclosing the printed pamphlet on health centers. Since few replies were received and meagre information resulted, a third letter was sent in the middle of November to those states from which no answers had come and which were likely to have health centers. Twenty replies were received to the first letter and fifteen to the third, so that thirty-four of the forty-eight states (70 per cent) and the District of Columbia have been heard from. Information about states not heard from has been acquired from other sources. A questionnaire was then sent to local authorities whose names had been submitted by the state officials and who

*A health center, as defined by the Department of Health Service of the American Red Cross, is a physical center of some productive form of coordination of the health agencies and activities of a community.*

*In the recent study of the health center movement, the Red Cross assembled valuable data concerning the relative progress of the various states in this movement. Eighteen states have established health centers.*

*Reliable information concerning types, distribution, functions, administration and status of the various health centers is herewith set forth.*

could not be visited personally. Thirty-five of these questionnaires were sent out at various times and so far replies have been received from 20 of them. During the first two weeks in October, Mr. Calver of the Red Cross visited six health centers in New York and during the last two weeks in November he visited eleven existing health centers and three communities where they are planned in New York, New Jersey, and

the New England States. Other information has been gathered from newspapers, magazines, by correspondence, and by conferences.

### Results of Investigation

1. *Number of Health Centers:* There were on January 1, 1920, seventy-two health centers in forty-nine communities, seven cities having more than one. Of these forty-nine communities, forty-six have a population of over 8,000, which is about 6 per cent of the 779 communities in this group (1917 estimate). There were thirty-three health centers proposed or planned for twenty-eight communities, only one community planning for more than one health center. The total of existing and proposed health centers was 105 in seventy-seven communities, seventy-four of which are places greater than 8,000 population or about 9 per cent of the total of such communities in the 1917 census estimate.

2. *Types of Health Centers:* Two distinct types are found, that in the smaller community where all activities are centralized in one health center, and that in the large cities where activities are carried on through several health centers in different parts of the city. The first type may be further divided into those which serve rural conditions and those serving urban communities.

3. *Distribution by Population:* The largest number of health centers occurs in two distinct population groups. Thirteen of the communities having

## Existing Health Centers—January 1, 1920

Place	State	Population	Auspices
Fort Smith .....	Arkansas .....	29,390	City
Hot Springs .....	Arkansas .....	17,690	City
Little Rock .....	Arkansas .....	58,716	City
Alameda County .....	California .....	(3) 285,330*	Public and Private
Pasadena .....	California .....	48,620	City
Bridgeport .....	Connecticut .....	124,724	City
Creston .....	Iowa .....	101,040*	Public and Private
Lawrence .....	Kansas .....	13,477	Red Cross and City
Topeka .....	Kansas .....	49,538	Public and Private
Louisville .....	Kentucky .....	240,808	City
Alexandria .....	Louisiana .....	16,232	State and City
Augusta .....	Maine .....	14,325	State and City
Bangor .....	Maine .....	26,958	State and City
Bath .....	Maine .....	9,396	State and City
Gray .....	Maine .....	6,440*	Red Cross
Portland .....	Maine .....	(3) 64,720	Red Cross
Waterville .....	Maine .....	12,903	State and City
Boston .....	Massachusetts .....	767,813	City
East Boston .....	Massachusetts .....	c 60,000	Private
Brighton .....	Massachusetts .....	c 20,000 (?)	Private
Framingham .....	Massachusetts .....	14,149	Private
Hyde Park .....	Massachusetts .....	c 20,000	Private
Norwood .....	Massachusetts .....	9,862	Private
St. Louis .....	Missouri .....	768,630	
Manchester .....	New Hampshire .....	79,607	City
Newark .....	New Jersey .....	418,789	City
Bridgeton .....	New Jersey .....	14,425	Red Cross
Buffalo .....	New York .....	(5) 475,781	City
Binghamton .....	New York .....	54,864	Public and Private
Brooklyn .....	New York .....	(2) over 100,000	Private
Dunkirk .....	New York .....	21,311	Public and Private
Oswego .....	New York .....	24,219	City
Poughkeepsie Township .....	New York .....	c 500*	Private
Riverdale .....	New York .....	c 2,000*	Private
Schenectady .....	New York .....	103,774	City
Watertown .....	New York .....	30,404	City
Canton .....	Ohio .....	62,566	Private
Cincinnati .....	Ohio .....	c 15,000*	Social Unit
Cleveland .....	Ohio .....	(7) 692,259	City
Portsmouth .....	Ohio .....	29,356	Private
Harrisburg .....	Pennsylvania .....	73,276	Red Cross and Public and Private
Philadelphia .....	Pennsylvania .....	(8) 1,735,514	City
Providence .....	Rhode Island .....	(2) 259,895	Public and Private
Jefferson County .....	West Virginia .....	34,306 (1916)	Red Cross
Green Bay .....	Wisconsin .....	30,017	Red Cross and Private
La Crosse .....	Wisconsin .....	31,833	Private and Public
Milwaukee .....	Wisconsin .....	445,008	County and Private
Oshkosh .....	Wisconsin .....	36,549	City
Richland County .....	Wisconsin .....	18,318*	Red Cross

Totals: 72 health centers; 49 communities

Unless otherwise noted, populations are those estimated by the Bureau of the Census for July 1, 1917. Those marked \* are as given by the local authorities; "c" means "about." Areas are those given by the Bureau of the Census for July 1, 1916.

## Proposed Health Centers—January 1, 1920.

(About ready to begin operations)

Place	State	Population	Auspices
New Haven .....	Connecticut .....	152,275	Public and Private
Norwich .....	Connecticut .....	21,923	Red Cross
Decatur County .....	Indiana .....	18,793	Red Cross
Kenton County .....	Kentucky .....	17,464 (1916)	Red Cross
Scott County .....	Kentucky .....	16,956 (1916)	Public and Private
Rockland .....	Maine .....	8,189	Public
Somerville .....	Massachusetts .....	88,618	Red Cross, Public and Private
Jamaica Plain .....	Massachusetts .....	c 20,000 (?)	Private
St. Joseph .....	Missouri .....	86,498	Public and Private
Nashua .....	New Hampshire .....	27,541	Red Cross
Millville .....	New Jersey .....	13,813	Red Cross
Elmira .....	New York .....	38,272	Public
Gloversville .....	New York .....	22,314	Public
Glens Falls .....	New York .....	17,160	Public
Hornell .....	New York .....	14,857	Public
Ithaca .....	New York .....	16,017	Public
Little Falls .....	New York .....	13,653	Public
New Rochelle .....	New York .....	39,192	Public
Olean .....	New York .....	16,927	Public
Troy .....	New York .....	78,094	Public
Utica .....	New York .....	87,401	Public
Wells County .....	North Dakota .....	13,204 (1916)	Red Cross
Cincinnati .....	Ohio .....	(6) 414,248	City and Red Cross
Indiana County .....	Pennsylvania .....	81,080 (1916)	Red Cross
Kingsport .....	Tennessee .....		Private
Norfolk .....	Virginia .....	91,148	Public
Wausau .....	Wisconsin .....	19,666	Public and Private
Stoughton .....	Wisconsin .....	4,761*	Red Cross

health centers are in the 10,000-25,000 group. There are about 440 cities in this group in the United States and thirteen is about 3 per cent of them. Fourteen are in the group of over 100,000 population. There is a total of sixty-nine such cities and fourteen is about 20 per cent of them. The totals of existing and proposed health centers show this tendency even more strongly. Twenty-seven existing and planned health centers out of the total of seventy-seven occur in the 10,000-25,000 group. This is about 6 per cent of the total of 440 such communities. Sixteen fall in the over 100,000 group. This is about 23 per cent of the total of sixty-nine such places. The only other group having a marked number is the 25,000-50,000 group, which has thirteen existing and proposed health centers.

4. *Distribution by Population Served:* An analysis of the population served and to be served by 103 existing and proposed health centers shows that again two special population groups are favored, namely, that of 10,000 to 25,000, which has thirty-one and that of 75,000-100,000, which has twenty-two. In the combined groups of 50,000 and over there are fifty-one.

5. *Distribution by Area Served:* Analysis of the area served by eighty-five of the existing and proposed health centers shows the greatest number to occur between 3,000 and 25,000 acres with the peak in the 5,000 to 10,000 acre group. The density of population served is rather evenly distributed with the greatest number in the extremes, that is the below one person per acre and the over twenty persons per acre groups.

6. *Administration:* Analysis of seventy-six communities with existing and proposed health centers shows that thirty-three are managed (or to be managed) entirely by the public authorities and that twenty-seven are managed (or to be managed) entirely under private auspices, while sixteen are or will be under control of both public and private administration. The Red Cross is concerned in nineteen instances.

7. *Functions:* Of forty communities having health centers in operation, thirty-seven contain clinics of some type, thirty-four do visiting nursing, twenty-nine do child welfare work, twenty-seven do anti-tuberculosis work, twenty-two do venereal disease work, fifteen do educational work worth citing, fourteen have dental clinics, eleven have eye, ear, nose, and throat clinics, ten have laboratories and nine milk stations. Other functions are scattering.

8. *Cost Data:* Very few figures on cost are available. Only seven health centers gave figures which seem reliable enough to use. The average per capita cost of maintenance is twenty-one cents.

This is cited only as a matter of interest and on account of the small number from which compiled is of little, if any, significance.

9. *Geographical Distribution:* Most of the ex-



City Hospital No. 2, St. Louis Mo., is housed in a building formerly occupied by the Centenary Hospital, which was remodeled last year. It has a bed capacity of 200, and is for the use of negroes.



The University Hospital, Missoula, Mont., is one of the new institutions of the year. It has a capacity of fifty beds.

isting health centers are in the east. New York has the largest number.

10. *Status of Existing Health Centers:* The best health center seems to be that at Oakland, Cal., which serves Alameda County. Green Bay, Wis., and Creston, Ia., also have good health centers, though the latter is called a community association. Newark, N. J., and Bridgeport, Conn., are good examples of centralized health work under large city health departments. Buffalo, N. Y., illustrates an excellent system of health centers. Schenectady, Oswego, and Binghamton, N. Y., are good examples of single health centers.

11. *Value of These Statistics:* The health centers of this report are representative of communities of all types. This study is valuable in that it shows present tendencies. Care has been taken to use only what seemed like reliable data. Even so, there are probably errors, but on the whole this report may be considered as indicating some of the necessary lines of development of the health center movement.

## THE HOSPITAL RELAY OF THE WORLD WAR\*

BY FLOYD KRAMER, COLONEL, M.C., U. S. A.; CHIEF OF HOSPITAL SECTION, HOSPITAL DIVISION, SURGEON GENERAL'S OFFICE, WASHINGTON, D. C., AND RUSSELL H. KETTELL, FORMERLY CAPTAIN, SANITARY CORPS, U. S. A., HOSPITAL SECTION, HOSPITAL DIVISION, SURGEON GENERAL'S OFFICE

THE development of hospital and evacuation facilities in a continuous relay from the United States across the Atlantic through the training areas to the battle line and back again in an increasing scale through the interior of France to home territory constituted an unbroken chain. Now that the war chariots have passed, opportunity is afforded for a brief statement of the solutions of the many and varied problems encountered.

The declaration of war in 1917 precipitated the first phase of this problem, the magnitude of which may be estimated from the size of the existing and draft armies contemplated by the War Department. Among troops in training or in the field there is inevitably, just as in civil life, a certain percentage of sick. While battle casualties always vary with the nature of warfare, it was possible to estimate them after an investigation of the experience of our allies.

The first responsibility which devolved upon the Medical Department was to make provision for the sick from unprecedented numbers of new citizen soldiers who were soon to be called into camp, and to organize Evacuation and Base Hospitals<sup>1</sup> for service overseas. To this end a large construction and organization program was entered upon, resulting in a hospital of from five hundred to a thousand of more beds at each of the thirty-two cantonments and the enlargement of about fifty Post Hospitals of the regular establishment. All construction in the United States was executed by the Construction Division of the War Department. When these thirty-two cantonment hospitals began to operate smoothly, advantage was taken of their facilities, and at each one of them several Evacuation and Base Hospitals for service abroad were organized and trained, partly from the seasoned personnel of the cantonment hospitals and partly from raw material. One hundred and sixty-one Evacuation and Base Hospitals were thus organized and sent to France. Fifty-eight more were organized before the date of the armistice but were not sent abroad.

The next responsibility was the preparation of hospitals to care for the sick and wounded

to be returned later from the battle lines of France. First, debarkation hospitals must be provided at the two ports, New York and Newport News, to receive from shipboard and give immediate care to those invalided home. They must be located near the docks and railroad terminals, must have great capacity, and, finally and most important of all, must be so constructed as to promptly admit and feed large numbers on short notice. Accordingly a number of large properties were acquired and the necessary alterations made. Of the New York group, the most notable two were Debarkation Hospital No. 3, formerly the Greenhut Building, and Debarkation Hospital No. 5, formerly Grand Central Palace. They had a combined normal capacity of over 5,000.

### Clearing Hospitals Vital Links

While on this subject, it is proper to note that time proved these two clearing hospitals very important links in the chain. They served their purpose admirably. Each at times admitted patients from transport at a rate of approximately 300 per hour, and each admitted in a single day upwards of 2,000. Under the term "admitted" is included: preliminary physical examination, throat culture, recording complete admission papers, disinfection of clothing, receipt for personal property, delousing, bath, issue of clean clothing, procurement of affidavit for back pay, and assignment to proper floor and ward. By 6 o'clock on the evening of the first day most men who were able to be about had been paid and given a pass.

At Newport News, the cantonment hospital at Camp Stuart was used for most of the debarkation work, but later on Debarkation Hospital No. 51, formerly the Soldiers' Home at Hampton, and Debarkation Hospital No. 52, formerly Richmond College, Richmond, Va., were acquired and altered for this work. The Camp Stuart hospital proved even more efficient than the individuals of the New York group, though this was to be expected, as it stood alone for some time, and for this reason had more work thrust upon it, and therefore more opportunity to prove itself a worthy link in the chain.

The next phase of this problem of caring for the returned sick from France was to provide

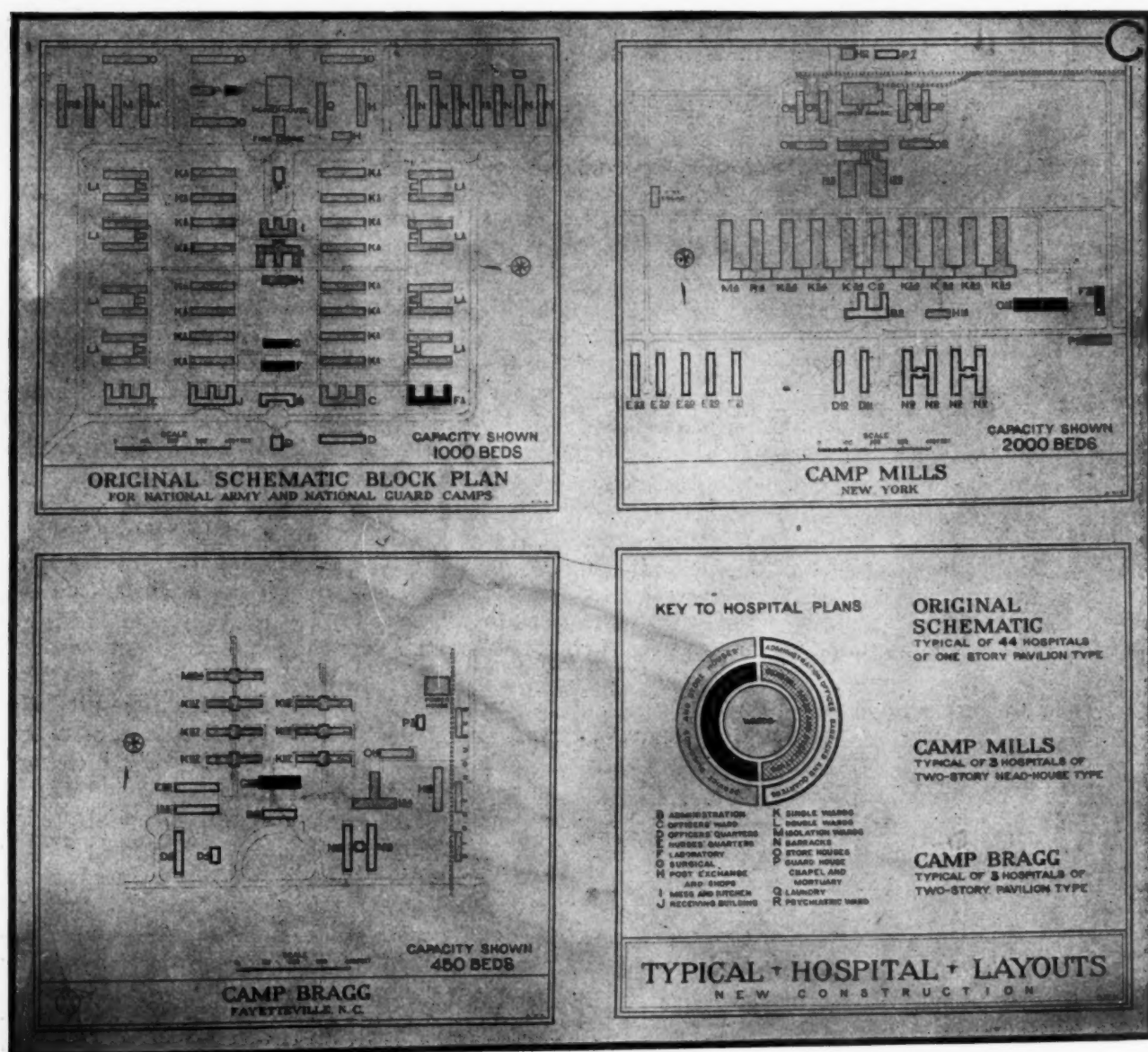
\*Authority to publish granted by the Surgeon General, United States Army.

1. Capitalization of hospitals or other units indicates that they are recognized units in the Tables of Organization of the Army.

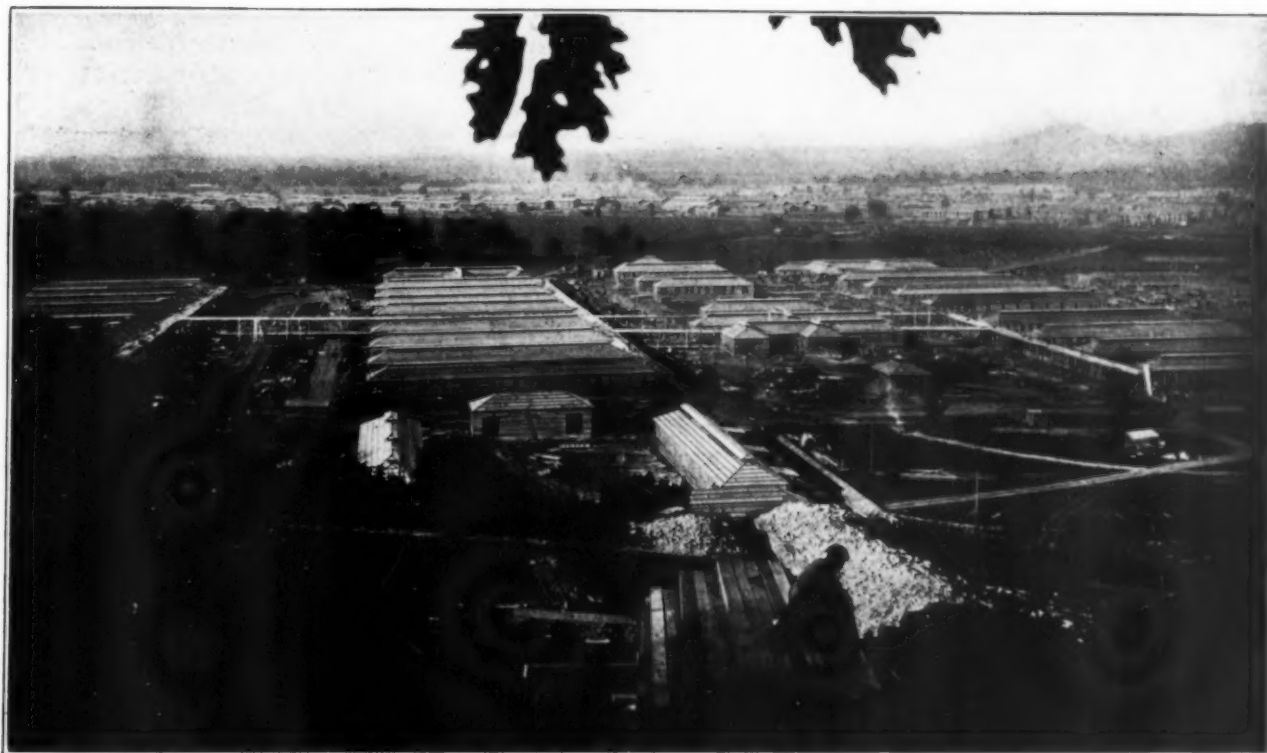
General Hospitals for their continued treatment. A survey had been taken of the civilian hospital situation throughout the United States. The Army had already drawn heavily upon the willing medical and nursing profession, and was to continue to do so. It was deemed wise to maintain control over all the sick of the Army. It was determined best to provide in the main general, not special, hospitals, and to distribute them over the densely populated areas, so that the sick could be cared for near their homes. Finally it was declared unwise to place maimed soldiers returned from abroad in the cantonment hospitals with the recruits, who were yet to see the grimmer side of war. So, with these things in mind, a construction, leasing, and alteration program was begun. The first General Hospital secured was a 500-bed hospital in New York City which started the list as General Hospital No. 1 in the summer of 1917,

and in the fall the beginning of General Hospital No. 2 at Baltimore, Md., followed. The work continued as the general military problem developed, until the armistice, when General Hospital No. 43 topped the list. There were many others in process of development, which were cancelled. The war having ceased, some of the wounded could be sent to cantonment hospitals, and this enabled us to place still nearer home, all the sick from France.

The program of hospitalization here in the United States, slowly as it seemed to develop, nevertheless had made progress, so that, whereas at the declaration of war there were but 10,000 beds in all military hospitals in the United States, one year later 70,000 beds had been provided. Most of them, however, were for the sick at camps, although General Hospitals for 10,000 sick had already been prepared for the day, un-



Layouts typical of most of the hospitals constructed *de novo* in the United States.



View of typical 1,000-bed cantonment hospital (incomplete), Camp Sherman, Chillicothe, Ohio.

certain but inevitable, when they would be needed. By the time of the armistice, the total number of beds had reached 120,916, distributed in 109 camp and cantonment hospitals, 80 post hospitals, 43 General Hospitals, and 3 department base hospitals. Crisis expansion is not mentioned in connection with the hospitals in the United States as expansion practically without limit was possible. Normally each patient had from 800 to 1,500 cubic feet of fresh air all his own. The greatest number of beds in United States hospitals at any given time was 173,505—October, 1918.

#### The Increasing Bed-Capacity

Reverting to our first responsibility—the care of the sick from the draft army in the United States—we had the usual experience with contagious diseases, sore feet, colds, and minor ailments in the unseasoned and non-immune troops in the United States. A considerable increase in capacity was installed at the thirty-two camp and cantonment hospitals, chiefly effected by the erection of ward-barracks for the convalescent and “walking” patients, of whom there was always a high percentage. Thus, many hospitals were doubled in size. Also, several large hospitals were built at newly organized training camps as time went on, and small camp hospitals were provided at the various temporary schools, arsenals, depots, proving grounds, and other stations, as fast as such activities sprang into existence. This

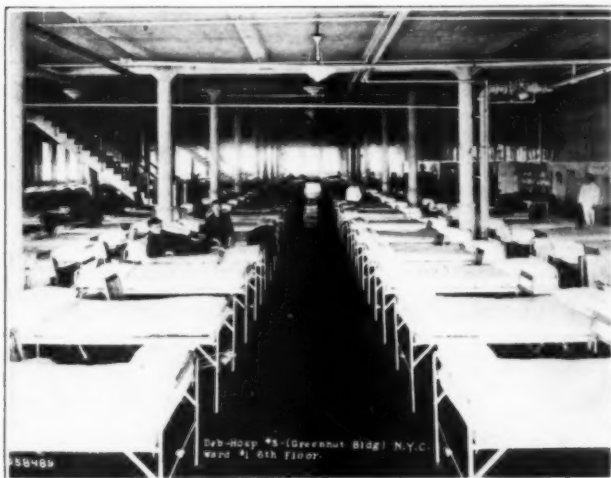
work was continued right through to the armistice.

When the armistice was signed, there were plans under way for a number of camps and hospitals far larger than any hitherto considered in this country. These hospitals were designed in two-stories and were of a semi-flexible head-house-and-wing type. This was the solution of the military problem presented by the proposed establishment of camps ranging in size from fifty to one hundred thousand men and was a necessary incident to the placing of 3,360,000 men in France by July 1, 1919. Most of these newer projects came to an abrupt end with the termination of hostilities but a few were partially built as at Camp Mills, Long Island, N. Y., where the original plans for a 4,000-bed institution were finally put through at one half that capacity.

#### Three Shipping Centers

It was decided to embark the great bulk of soldiers from the three important shipping centers, New York, Newport News, and Charleston, S. C. Facilities therefore had to be provided at these places, and not at the normal percentage as seen in post or camp, but at a much higher figure due to the unusual conditions where units were continually arriving from the cantonments and departing by transport, leaving their sick and those exposed to contagion behind in accumulating numbers. At New York such sick were provided





A 170-bed ward in Debarkation Hospital No. 3, New York City.

essentials complete. This hospital, Type B, as it was known, laid out with a normal capacity of 300 beds, could in times of emergency, by setting up tentage in prolongation of each ward-building, be expanded to 1,000. The construction unit was the double-wall portable wooden hut, 20x100 feet, that had already proved its worth with the governments of our allies. Bought in whatever country they were at the time available (they were never designed in the United States, nor were they ever procured here because of the acuteness of the shipping problem), these huts, in sections, were sent to the desired location for erection. In France the work of setting up hospitals, together with any necessary road, sewer, and water installation, was the responsibility of the Corps of Engineers.

#### Medical Department Concentration

For the final training of mobile organizations of the Medical Department there was a specially assigned area covering twenty-five square miles and taking in nine villages with a billeting capacity of 500 officers and nurses and 10,000 enlisted personnel. This reservation was known as the Medical Department Concentration Area. It served as a place of instruction for newly arrived units and, being located in the Zone of the Armies, provided for rest periods for organizations on duty at the front by withdrawing and replacing them by fresh units, and gave opportunity for the overhauling and repair of their equipment.

Next in the hospital chain to those at the training areas were the mobile sanitary organizations accompanying the armies up to the front. These consisted in Field Hospitals, Evacuation Hospitals, Mobile Hospitals, and, in time of emergency, Red Cross hospitals. They formed the elastic connection between the moving armies and the fixed establishments in the rear.

Let us follow the course of a man wounded in action back, step by step, to the rear and finally to the United States.

The occasion is perhaps but the work of an instant. A crash—a shower of dirt and shell fragments—and our man is on his way to the Battalion Aid Station immediately in his rear. Here, as the name implies, immediate attention is given to the injury, but no elaborate treatment is attempted. As soon as the way is safe—perhaps at once, perhaps not until night—the patient is transported (by ambulance or hand or wheel litter), or, if he is able, walks to the Field Hospital set up not far to the rear.

#### Distribution of Casuals

In the organization of our Army there are four Field Hospitals to each Division. One of these is being used as originally equipped as a sorting station for the Division's sick and wounded, and to this our man is taken. Of the other three hospitals, one has been especially outfitted with extra bedding and a Mobile Surgical Unit to receive the acute surgical cases (resulting in saving the lives of at least fifty per cent of this class of patients, to whom further evacuation at this time would destroy all chance for recovery); one has been developed to treat gas casualties by the provision of shower baths, requisite chemicals (including oxygen in tanks), and new clothing, and one is customarily held in reserve. A number of Field Hospitals are cleared through an Evacuation Hospital, just as the Aid Stations empty into a Field Hospital.

The Evacuation Hospital now comes next on our way back from the firing line and is the most important link in our chain. It provides facilities (this time quite complete) for the treatment of such cases as should not be subjected to a rail-

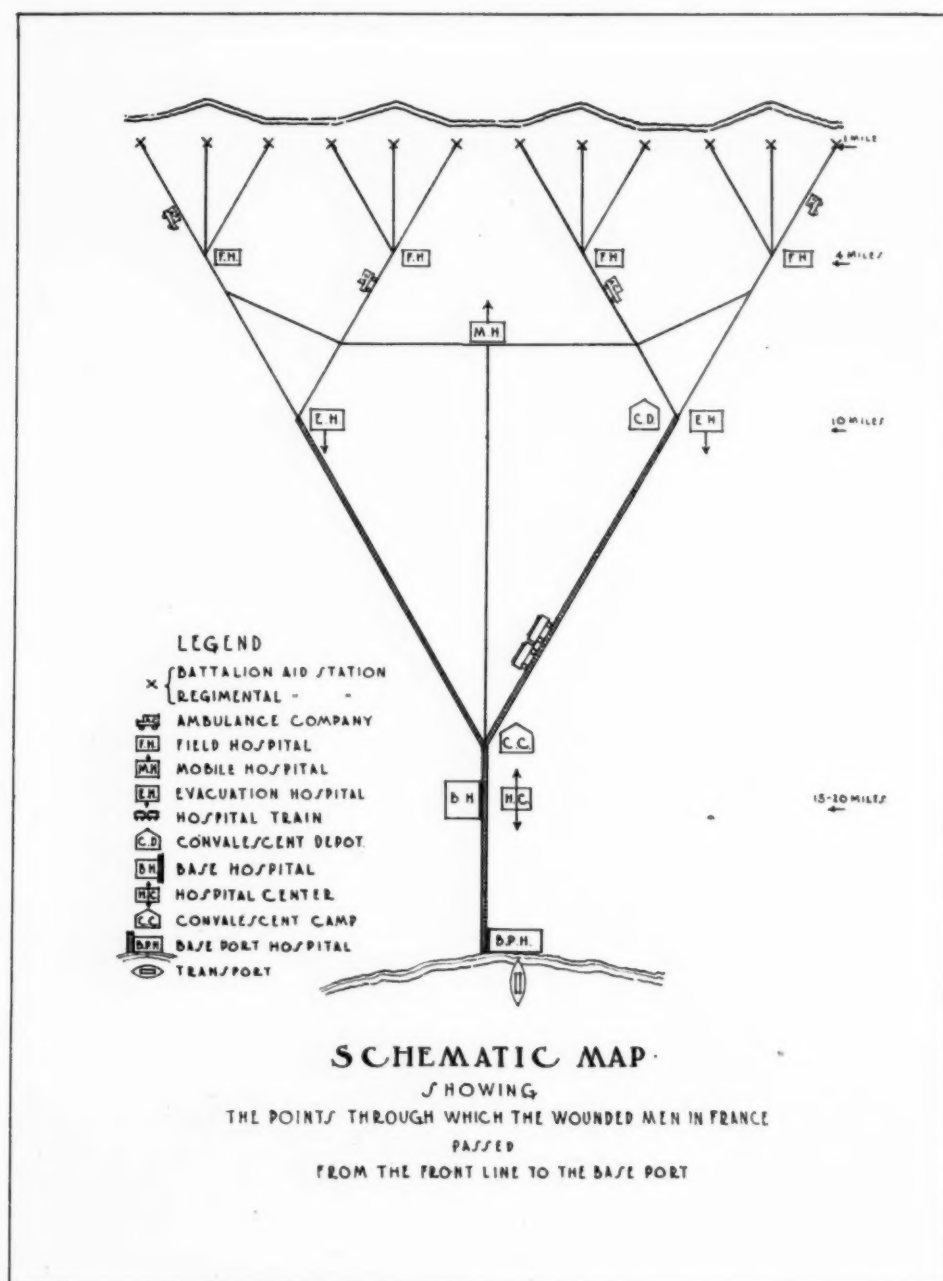


Camp Hospital No. 10, Prauthoy, Haute Marne, France, showing the portable wooden huts that were the basis of all new hospital construction overseas.

road journey. During periods of unusual combat activity there was brought up a Mobile Hospital (we had in use twelve, organized with 120 beds and six operating teams each) to work alongside the Evacuation Hospital, or between it and the Field Hospitals, caring for the more

it became necessary to assign to these hospitals, organized into "teams," some of the best surgical talent in the country.

In connection with the Evacuation Hospitals and as a result of experience, there arose a necessity for the establishment of certain large cen-



Schematic map showing the points through which the wounded men in France passed from the front line to the base port.

severely wounded. To function properly, Evacuation Hospitals must be located at railheads served by standard-gauge tracks, to permit of speedy and easy accessibility by hospital trains. The greater part of the primary surgery on American casualties was performed in these hospitals. In addition to its own high-class personnel, in times of stress

ters known as Convalescent Depots, into which could be poured directly from their examination at the Evacuation Hospital those cases for whom a quick return to duty was anticipated. In this way it was proposed to save either the rail transportation that would have been necessary to move them into the Base Hospitals, farther back, or

the accommodation that they would have required in the much overtaxed Evacuation Hospitals. These Depots either were of tent construction or were established in existing French buildings.



First aid station located in the basement of a shattered house at Les Eparges, Troyan Sector, France.

They were designed for never less than 3,000 beds, and, in times of emergency, by the addition of one or more mobile surgical units, they could be used for the more severe as well as for the light cases.

But we will suppose that it is decided to send this man in whom we are interested, without delay to a Base Hospital. He has been examined, recorded, given necessary surgical attention, and placed on board a Hospital Train, possibly on the afternoon of the day of his arrival at the Evacuation Hospital.

### Hospital Trains Kept Busy

These Hospital Trains, of which we had twenty-one in France,—nineteen of the British Type and two of the French, all vestibuled,—were in constant operation. They kept the units up toward the front cleared by filling up the Base Hospitals in the rear. They offered every convenience for carrying and feeding a load of 360 lying or 600 sitting cases, with the necessary attendants. During the last months of the war, when railroad facilities were taxed to the utmost, we were using in addition to our own trains, above mentioned, at times as many as forty-seven extra hospital trains borrowed from the French. These borrowed trains were of the improvised, non-vestibuled type and varied greatly in capacity and equipment.

Upon arriving at a Base Hospital, our man has completed the first phase of his journey. Here he remains for treatment, until such time as he is ready for duty again, or, if he is incapacitated

for a prolonged period, until he is ready for the voyage home.

### American Plan Impracticable

The history of the Base Hospital development in France is worthy of a brief discussion. Early in the war a set of plans, much like those used for the cantonment hospitals in the United States, were sent overseas with the feeling that they would be of service whether adopted or not. They were found impracticable for two reasons. In the first place, as was pointed out in connection with the camp hospitals in France, during those first months no new construction projects could be considered because of the scarcity of labor and material. And in the second place, when finally there were materials to use and men to use them, there was so much construction to be done that a layout such as the one sent from America, involving extensive sewage, plumbing, and heating systems, a wide spacing of buildings, extensive terrain, long side porches, and other refinements, could not be considered. So at first the conversion of existing French buildings was resorted to in establishing Base Hospitals. Eventually, however, it became both advisable and necessary to build, and plans for a "Type A," or Base Hospital, were drawn up under the supervision of the Chief Surgeon, A. E. F. Here, as in the case of the cantonment hospitals in America, the plan of Letterman General Hospital at Presidio, Cal., was in mind, but the interpretation in France was of necessity far more compact than that in America, and the portable wooden hut was the basis of it all.



Mobile Hospital No. 2 ready to move to the assistance of an Evacuation Hospital "Somewhere in France."

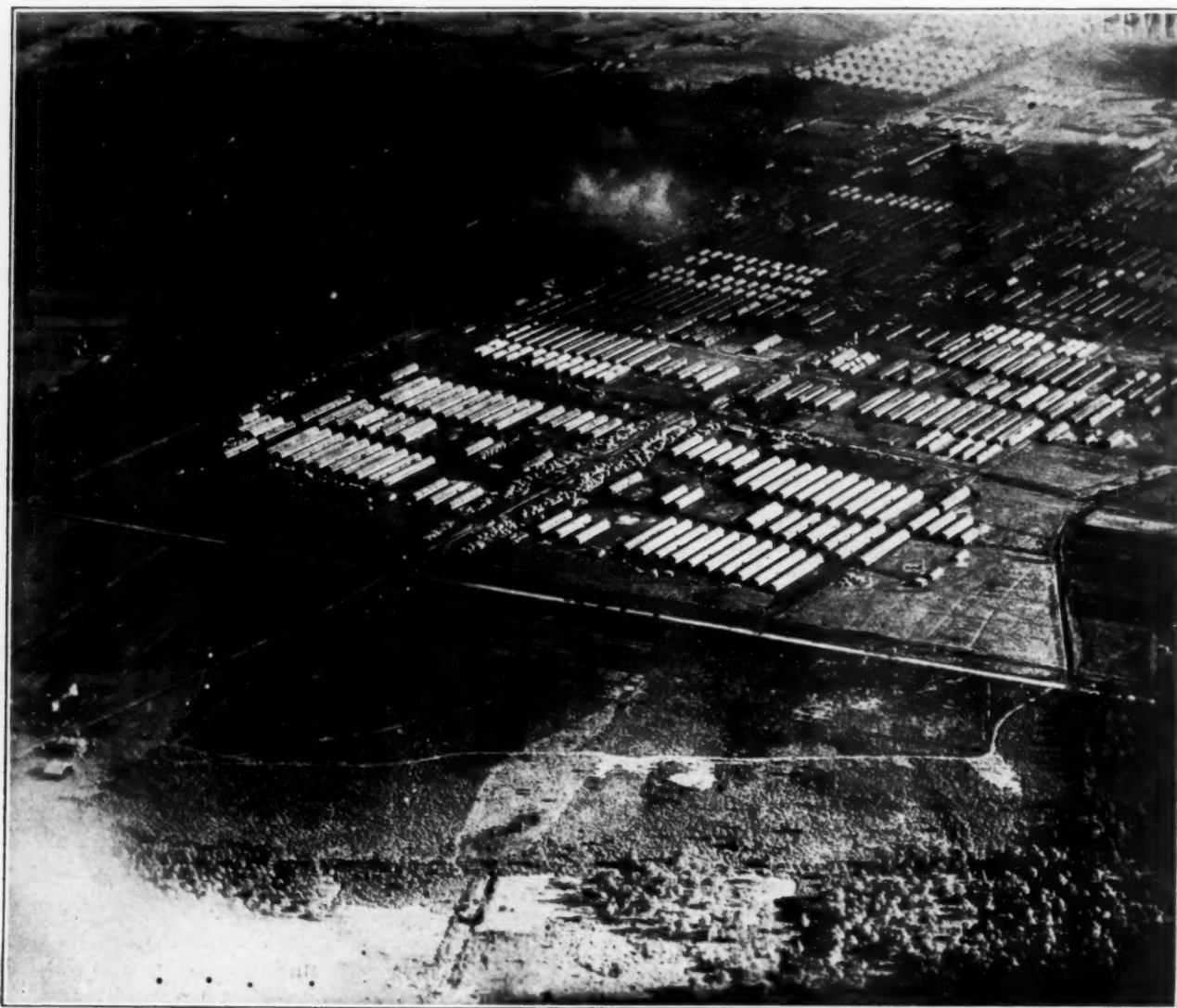
"Type A" had a normal capacity of 1,000 beds and was figured originally in crisis expansion at 2,000. Later, however, this figure was reduced to 1,500, as it was found that doubling the number

of patients in times of emergency put too great a strain upon the personnel. The ward building was 20x160 feet for fifty patients, and the crisis expansions, as at the camp hospitals, was effected by tentage raised as a continuation of the ward and using its services. The highest order of definitive treatment was carried on in these hospitals.

It was found desirable from an administrative standpoint to group two or more Base Hospital Units together on one site with a suitable railroad spur. Thus a considerable number of "hospital centers," as they were called, were developed, with a proposed ultimate capacity of from ten to twenty thousand beds each. In these centers certain units could be especially assigned, this one to surgical cases, that one to pneumonia, and so on; and it was frequently the case that a new and inexperienced medical unit would be located beside one of well established routine, thus to be broken in.

Near, and a part of, each Hospital Center there was established a Convalescent Camp, a tent city, to which those patients who had reached that stage in their recuperation where they required little attention could be transferred. Here they were well sheltered and fed and given enough work and exercise to fit them for their return to active duty. As far as possible, the men were removed from hospital atmosphere, and their moral fiber strengthened by band concerts and entertainments.

Soldiers incapacitated for further service were to be transported back to the United States. Before this journey could be taken, however, they must recuperate sufficiently for the trip, which meant two things: first, an accumulation of sick and wounded in the hospitals in France, and second, a high percentage of ambulant or walking patients among those returning. In meeting this accumulation, the Chief Surgeon, A. E. F., was operating at the time of the armis-



Aeroplane view of the Beau Desert Hospital Center showing six 1,000-bed Base Hospital Units, three on each side of the railroad track, France.

tice, 153 Base Hospitals in France; and this number was considered hardly more than a beginning, had hostilities continued much longer. The total number of beds in hospitals at that time, exclu-



Ward, typical of both Base and Camp Hospitals in France.

sive of those in Evacuation Hospitals, was 209,134—or 283,533 with crisis expansion. Of these, 190,880 were occupied. One hundred and fifty-five thousand beds were in process of installation and 60,000 additional beds were ready to function as soon as personnel and equipment should arrive. But the personnel was not to arrive. It was the fifty-eight Evacuation and Base Hospitals referred to in the third paragraph (page 215) ready to sail, but held up in the United States when armistice was signed.

### Wounded Men Return Westward

Let us now think of our patient as one of a high-spirited crowd of returning wounded soldiers bound for New York or Newport News, the two ports designated for their reception. At these two points, as we have seen, special facilities for the reception and clearing of large shipments of patients had been carefully prepared. It was a wholesale proposition, as upon short notice several thousand patients might be quickly landed, and they must be taken care of immediately. In New York, at the height of its activity, there were 18,000 beds provided, of which about one-half were used as debarkation hospitals for the reception of A. E. F. sick and wounded. These hospitals, as previously stated, were located in buildings such as the Greenhut Building and the Grand Central Palace. At Newport News the total beds provided was 7,000, and as in New York, about one-half of this number was used for the reception of the debarkation sick and wounded.

It is an interesting point that in debarkation hospitals, as in Evacuation Hospitals, the key-

note of successful operation is the ability to empty the institutions with the greatest dispatch. This was made possible by the installation of special facilities for that work and an active system of forwarding the patients to the General Hospitals. This entailed efficient recording, examining and classifying of the cases, and continuous transport by rail to the near and far corners of the United States. Every soldier was sent to the hospital nearest his home which could give him the treatment which his individual case required. Up to November 30, 1919, 147,487 sick and wounded from France were received into the port hospitals, three-fourths at New York and one-fourth at Newport News; fed, treated, rested, clothed, and paid, they were then sent by Medical Department hospital trains to the interior of the United States. Of the above number, all but 40,000 cases were handled in five months—January to May, 1919. Also 44,864 transfers were made between the interior General Hospitals, making a total of 192,351 cases handled by Medical Department trains in the United States.

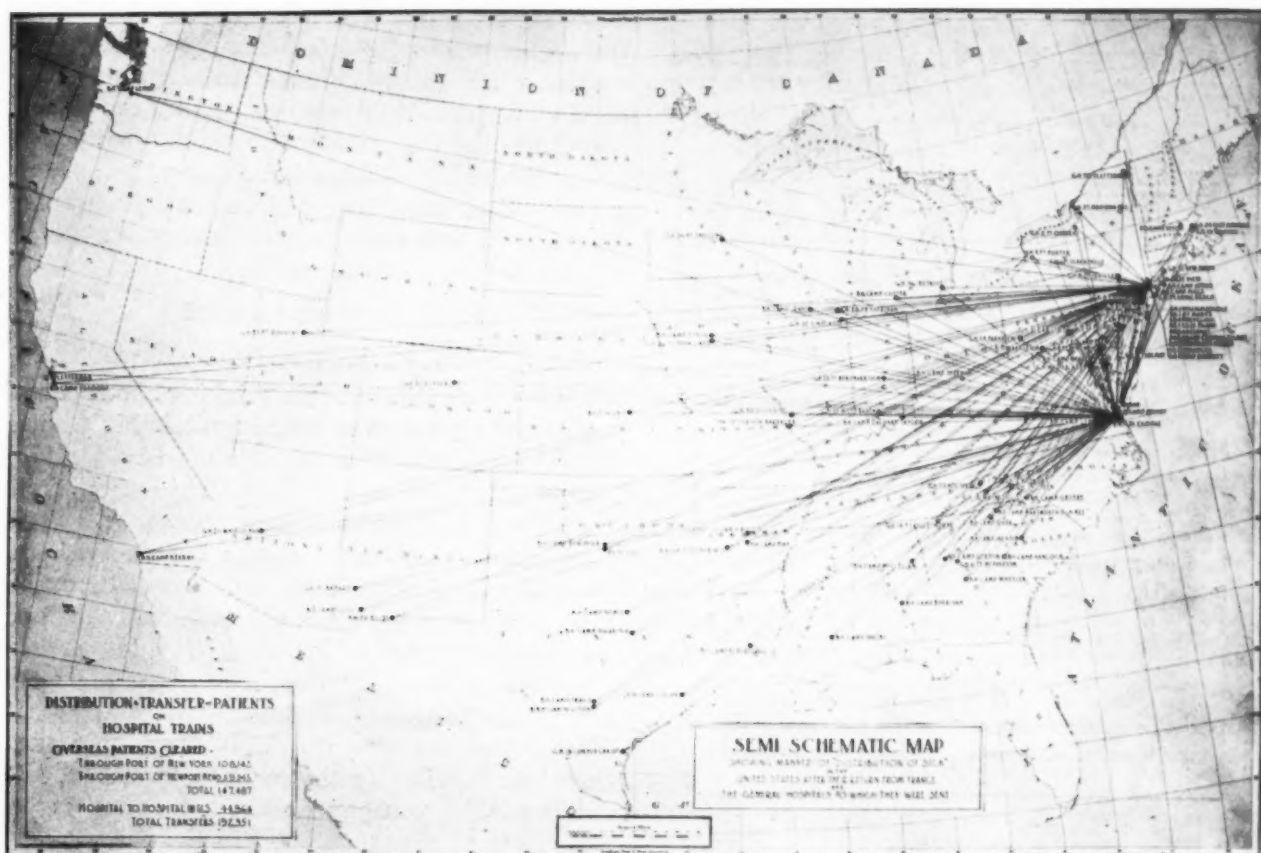
Transportation of sick in the United States was accomplished by (a) four Hospital trains, each consisting of: 1 kitchen and attendants car, 1 baggage and store car, 3 bed cars and 2 tourist cars; and (b) forty so called "Unit" cars. The "Unit" cars were so designed as to carry attendants, supplies, kitchen, etc., for 250 sick, so that with 8 standard Pullmans attached, each "Unit" car created a 250-bed railway hospital. We thus had in fact 44 hospital trains with a carrying capacity of 8,000 patients. The 44 "Unit" cars were relatively inexpensive in initial cost and un-



The Convalescent Camp operated in connection with the Mars Hospital Center, France.

usually economical in operation cost, as of each whole nine-car train, the "Unit" car was the only one remaining at the end of the out-bound trip to be hauled back to port, the Pullman cars having





Map of United States showing hospitals to which sick and wounded were sent and showing schematically their distribution, fan-wise from the ports of debarkation.

and particularly those with respect to the Medical Department, of which so little is heard, one will find that the hospitalization of the sick and wounded constituted one of the largest problems and that it was solved in a creditable manner.

#### HEALTH DEMONSTRATION IN MISSOURI

A health survey and demonstration undertaken by the United States Public Health Service in several localities in Missouri by which it is hoped to establish standards for child hygiene work in the school and home, is being followed with interest by health officers and educators throughout the country.

The first thing the demonstration will emphasize will be the registration of births. Health conditions of children will be studied. Infant health stations will be established and, for children needing medical attention, treatment will be made accessible. A modern health crusade will be conducted in the schools by means of examinations, and, where necessary, proper treatments. Correct food and exercise will be suggested and health classes will be conducted. By these means it is hoped to save thousands of lives, and to remove physical and mental handicaps at an early age so that coming generations may be stronger and the stamina of the nation greatly improved.

Missouri was selected for these demonstrations because the health conditions in that state are typical of the average American community. In addition, the legislature created a department of child hygiene and the State Board of Health asked the Public Health Service to demonstrate how this department could best function. The study will

not cover the whole of Missouri, but will be confined to those communities which offer the best prospect of putting the work on a permanent basis. If it proves successful, other states will undoubtedly be glad to adopt the same system.

#### CHURCH WOMEN LABOR FOR HUMANITY


A Hospital Committee is an important branch of the Churchwoman's League for Patriotic Service recently organized with national headquarters in New York. Co-ordination of work in church and nation for the improvement of the country and the conservation of energies so nobly expressed in the war in order that the urgent needs of peace may be clearly understood and worthily met are the aims.

The League came into being in order that the skill in making surgical dressings and garments, and in knitting which was acquired during the war might be utilized by presenting to the women the needs of the hospitals, and by representing it as the civic duty of every woman who knows how to do this kind of work to help the institutions of her own city.

Work rooms have been opened where women congregate on Tuesdays and Fridays, and they are responding in increasing numbers to the appeal to keep in circulation the talents which will result in greater efficiency in the institutions throughout the country.

Besides the Hospital Committee, there are committees on Americanization, Canteens and Saloon Substitutes, Modern Methods, and on Preventive and Rescue Work.

There is no way under heaven by which a person can be happy without being good, clean, square, and true.



*The*  
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### FROM THEORY TO PRACTICE

**T**HE fact that the hospitals of the Department of Public Charities in New York put into effective operation last month a plan of staff meetings, through which the staff members will be able to check up the character of their work in these hospitals, is of great significance. An account of this action is given on page 236 of this issue of *THE MODERN HOSPITAL*.

After the superintendents and the staffs approved the plan as outlined by Commissioner Bird S. Coler, the Commissioner issued a brief order which penetrated to the basic purpose of the hospitals. "Pursuant to the end that all patients in the hospitals under the direction of the Department of Public Charities," he wrote, "receive the most efficient care known to the respective staffs of the hospitals, the following orders are issued."

Probably no single decision in recent years will ultimately do more toward a close and right relationship between the general public and the medical profession than this one. Facts are undebatable. New York now does away with sentiment and proceeds to the facts concerning the care of all patients in the municipal hospitals. A powerful public confidence in these hospitals is certain to follow; and this confidence is the basis of adequate public support.

What happened was that the hospitals under the Department of Public Charities accepted and carried out to the last degree the program of hospital standardization as suggested by the American College of Surgeons. The staffs of these hospitals favored the action for only one reason, the reason being that they believed the program to be thoroughly sound and the best program yet offered for consideration.

### ATTRACTIVE GROUNDS AN ASSET

**I**T is not too early to begin thinking about beautifying the grounds of your hospital. Mr. Charles W. Leavitt deals with this subject briefly in his article on "Landscape Treatment of Hospital Grounds" on page 229 of this issue. Perhaps you have just constructed a new hospital, erected a new pavilion or made some extensive alterations. Your grounds are, in consequence, badly torn up, bare, and unsightly. Do not let this condition exist any longer than you can help. The task may be large enough to justify the employment of a landscape gardener. If, however, the situation does not justify this expense and funds are not available, you can do much through careful planning and a real interest in the subject.

Not a little can be gained from a perusal of the catalogs of some of the leading seed merchants. These catalogs give lucid descriptions of various flowers, shrubs, and vines, indicate how and when seeds and seedlings should be planted, and how plants should be cared for. Some of them contain reproductions of actual photographs of flower beds so that you can get a fairly clear idea of effect and arrangement. If you want to have a practical knowledge of the flower garden, even though you may not be able, personally, to give much attention to it, your local library can supply you with helpful books on the subject.

Attractive grounds are an asset to any hospital. They win friends; they comfort patients, and in a subtle, though none the less real way, help them on the road to recovery; they contribute to the pleasure and contentment of all the hospital's workers. Do not neglect them.

A hospital cannot neglect the appearance of its grounds with any greater impunity than a superintendent can neglect his or her personal appearance. This was brought home very forcibly to us one day last summer when we visited a small New England city for the purpose of calling on two of its hospitals. Our first reaction to one was decidedly unfavorable; to the other, most favorable. This was due not so much to the architecture of the buildings as to the appearance of their

grounds. One was decidedly messy. The grass had not been cut in weeks. Weeds had sprung up on every hand. There were no inviting flower beds and vines. Ashes had been allowed to accumulate in the rear yard, and accumulated papers were being blown about in eddies of wind. The other hospital, less pretentious in architecture, had grounds that were attractively arranged. The graveled roads were well kept. The grass had been mowed and bright colored flowers nodded a welcome.

Later, what we were almost morally certain of before we entered either institution, was confirmed by our own observation. The first hospital did not have a good standing in the community. It was inefficiently run by a superintendent who lacked administrative experience, and by her own personal appearance showed she lacked an appreciation of the value of well kept grounds. The other hospital had an excellent reputation, was steadily growing, and was run by a thoroughly efficient hospital executive, who saw the value of making and keeping the grounds attractive and inviting.

To be sure, the success of the latter institution was no doubt largely due to its capable administration and its skillful medical and surgical service, but these were in no small measure reflected by the attractive appearance of the hospital grounds. In no mean degree the appearance of the grounds of a hospital tend to make or break it.

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### VISITING FACTORIES AN AID TO HOSPITAL PURCHASING

TO assist in reducing the high cost of living—and this holds true as much for corporate bodies such as hospitals and allied institutions as for individuals—our government asks us, among other things, to buy with discrimination. Discrimination, however, presupposes knowledge. And the more intimate this knowledge the better prepared we are to exercise whatever power of discrimination we possess. This applies as much to discrimination in the purchase of hospital equipment as to discrimination in the purchase of any other commodity. One way for hospital superintendents and others charged with responsibility in the purchase of equipment to acquire this intimate, first-hand knowledge is to spend an afternoon now and then, as time and opportunity offer, in one or more of the factories where hospital equipment is manufactured.

Here you can see and perhaps handle raw materials and rough parts, watch the machinery, and observe the workmanship and manufacturing processes that pertain to the making of finished

pieces of equipment. Here, for instance, you may watch pieces of sheet and tubular steel fashioned into a thing of usefulness and often of beauty, or a rough, seamless, brass shell transformed into a dome-shaped sterilizer whose polished surface vies with milady's mirror.

Knowledge acquired through such visits makes you a better judge of the quality of goods you are seeking to buy and the skill and workmanship put into them, and enables you to guard against having a worthless, or at least an inferior, article foisted upon you quite so frequently. You will learn to know, for example, whether the white enamel paint on the beds you propose to purchase was applied by dipping or with a brush, or whether a sterilizer is finished with inferior nickel plate or plate of excellent quality. You will not be so utterly dependent upon what the salesman tells you, for, knowing something of what goes into a given piece of apparatus, you will be the better able to talk intelligently of its make-up and merits, and to rely on your own judgment as to whether a piece of equipment will do what the manufacturer claims it will do, whether it will meet the needs you desire to have it fill, and whether it will give a good account of itself under certain conditions and kinds of treatment.

Visits of this sort will familiarize you with the terminology of the trade. When a salesman, in describing an instrument cabinet, informs you it is built with cold rolled sheet steel, back, top, and bottom, you will not look at him with a blank expression of ignorance. You will have seen and handled cold rolled sheet steel in the rough as it lay on the floor of the factory and, perhaps, after your visit, you will have supplemented the knowledge you gained by reading about the manufacture of cold rolled sheet steel in your encyclopedia, or, better still, by a visit to a steel mill, should you chance to be in the neighborhood of one.

Not the least benefit you will derive from such visits is a better comprehension of the care a piece of apparatus should receive and the manner in which it should be handled. You will, in consequence, be in a much better position to instruct your subordinates regarding its care and use than you would otherwise be.

In short, the sort of knowledge thus gained will enable you to do your purchasing with a sense of assurance and relieve you from being so largely dependent, as you would otherwise be, upon the representations of those who naturally are interested in selling you their particular product.

Helpful as the commercial exhibits at the annual meetings of the American Hospital Association are, and much as we urge hospital executives

to take full advantage of the facilities they offer for the examination and inspection of equipment, personal visits to the factories of manufacturers have certain advantages over the commercial exhibit which cannot be gainsaid. At the commercial exhibit you generally see the finished product. You can handle and inspect it. If it is a mechanical device, you can examine its mechanism and have an actual demonstration of how it works instead of depending upon a written description which is seldom satisfactory. You can have technical points explained that may be difficult to understand unaided. But at the factory, you see the raw materials or the component parts of a piece of equipment. You see how they are put together and what is actually involved in the manufacturing process. And to see a thing in process of making has distinct advantages over seeing the finished product.

The better class of manufacturers will welcome your visit and will arrange to have you escorted about their plants by men sufficiently well informed to answer such questions about their products, the materials used, and the processes of manufacture as you choose to ask them. Visits such as these are a phase of education hospital superintendents can ill afford to neglect.

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### THE RED CROSS BUREAU OF INFORMATION FOR NURSES

THE hospitals of America are obligated to accord their fullest support to any undertaking which seeks the betterment of the nursing profession and improves the opportunities of individual nurses for advancement. It is the purpose of THE MODERN HOSPITAL here to remind the superintendents of hospitals that their cooperation is needed in building up the work that has been begun among the nurses returning from war service by the Red Cross Bureau of Information for Nurses.

For the last twelve months the Bureau has operated a placement service for the returning nurses. Established in cooperation with the three national organizations of nursing, with its headquarters at New York City, the Bureau has rendered invaluable assistance to nurses and institutions throughout the country during the period of readjustment.

The work is to be continued permanently, for the benefit of the nursing profession and for the accommodation of the hospitals, public health agencies, and nursing services. The regular patronage of the hospitals is essential to the successful operation of a placement service such as the Bureau endeavors to provide. Hospitals every-

where should make it a policy to utilize the service whenever the procurement of nurses qualified for staff duty or special services becomes necessary.

What are the reasons why this should be a policy of the hospital? Briefly, these reasons may be stated in three matter-of fact propositions.

First: The Bureau of Information for Nurses brings to the institution requesting them, the women who are most qualified by training, experience, and inclination to fill the responsibilities of the regular and special positions on nursing staffs.

Second: This service is a direct channel through which an individual nurse may be assisted to a solution of her personal problem, which is to "find herself"—to secure for herself just the sort of opportunity that she most desires.

Third: The placement service of the Bureau, when utilized to the fullest extent possible, both by institutions and nurses, widens the horizon of the individual nurse, brings to the institution higher efficiency by the employment of more competent personnel, and elevates the prestige of the whole nursing profession. Along with this gain in the prestige of the nursing profession, the hospitals themselves begin to possess more attraction in the eyes of the young women who contemplate careers in that field of work.

These results will follow simply through the consistent and continued cooperation of all concerned.

The task of placement is the first and primary function of the Bureau, but not the only function. In its files, the Bureau now has accessible an extensive library of information regarding war-risk insurance for nurses, Federal reeducation and hospitalization of sick nurses, and requests for institutional nurses covering a wide range from staff nurse to hospital superintendent. To this Bureau, public health agencies as well as hospitals may present their needs for nurses for infant welfare, mental hygiene, medical social service, school nursing service, and industrial work. Complete information is furnished to student nurses regarding Red Cross scholarship and loan funds for assisting nurses to prepare themselves to enter various phases of the profession which interest them.

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The poorest people on earth are those who make the most of what they have, and the least of what they are.

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The doctor entered the patient's room in the morning and according to habit read the chart first. He was surprised to read: "2 a. m. Patient very restless. Nurse sleeping quietly."

## THE LANDSCAPE TREATMENT OF HOSPITAL GROUNDS

By MR. CHARLES W. LEAVITT.

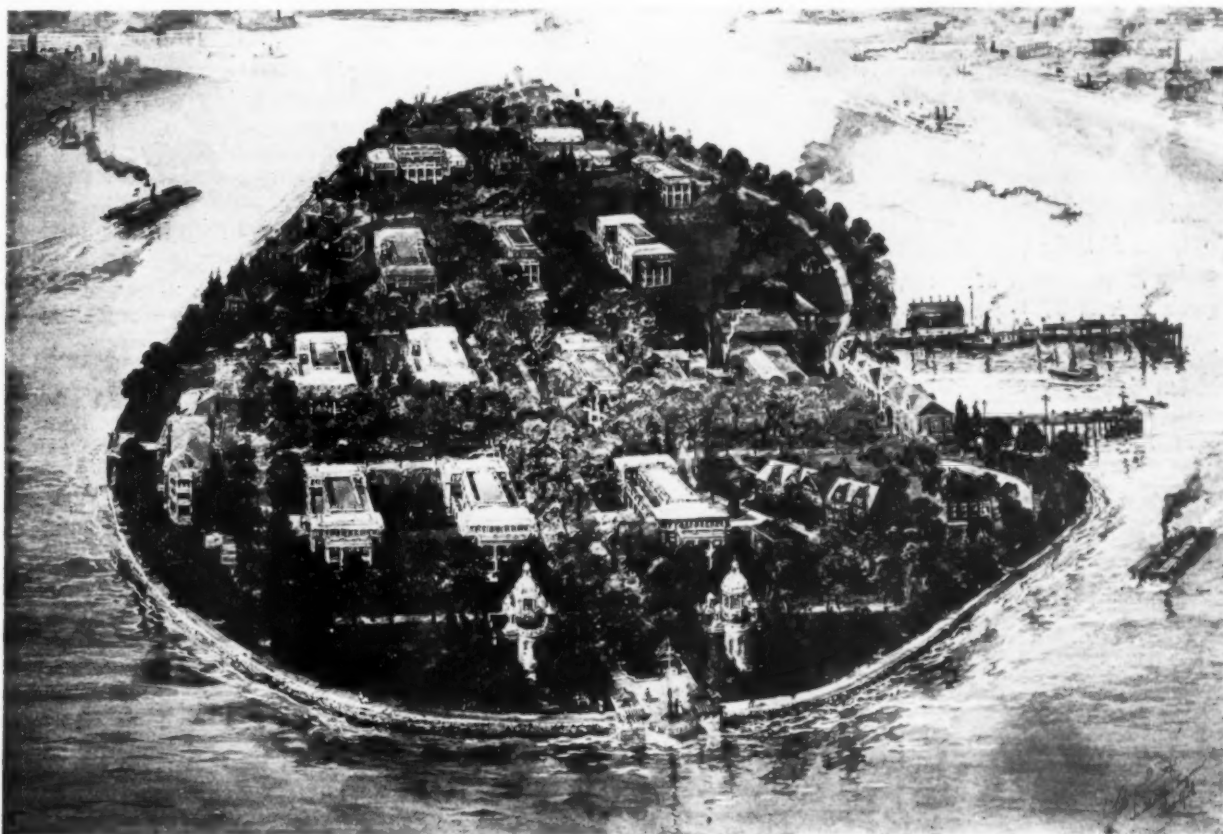
The subject of landscape treatment of hospital grounds is one which perhaps has not received as much attention as would have been given it if the greater number of our hospitals were not situated in cities, where extensive grounds are impossible. It is the tendency of the present time to take such institutions outside the built-up portions of cities, where the opportunities for rest and quiet are better. The advantages of such a step are self-evident, and the result must be that private institutions of this character, as well as public, will be situated in our suburbs rather than in our cities. The increased facilities for rapid transportation, both by private automobiles and public carriers, are removing the only objection to this.

New York City has used the islands near Manhattan as the location of municipal institutions of this sort, and early recognized the importance of layout in securing

superintendents, as well as by all who immediately become actively interested in any large building project. He must know the conditions of the soil and so place and plan the vegetable gardens and other productive features as to make the institution as self-supporting and as interesting to convalescents as possible. The utilitarian purpose of the layout is, in this case, uppermost, to be affected by the esthetic only in so far as it can be proved to those who jealously guard the public funds that such alteration of, and deviation from, the strict severity of utilitarianism is for the ultimate good of the inmates of the institution, will hasten their convalescence, and bring about their early departure.

### Mental Effect of Fountains

The construction of a pool with splashing fountains and open-air pavilion is considered more for its excellent effect on the mental and physical condition of the patients than for its place in the scheme of the layout and its value



Riverside Hospital, North Brothers Island, N. Y.

the best results from the money invested in the different plants. General plans for the development of North Brothers Island, Randalls Island, and other islands were made and have been carried out as fast as funds were available.

### Landscape Beauty Aids Recovery of Patients

The first duty of the landscape architect in laying out the grounds of a public institution of this sort is so to place the buildings that their exposure to sunlight and winds is the best possible. He must consider the prevailing winds of the locality, the atmospheric conditions, and the climate, maintain an open mind to the many suggestions given him freely by board of directors, doctors and

as an esthetic unit in the plan. Usually, boards of directors for public institutions do not look kindly upon a few hundred square feet reserved for a tennis court for convalescents, doctors, and nurses, nor do gay flower gardens or expensive planting for effective mass and group appeal to them, especially if the institution is situated so far without the beaten track of travel as to make it easily accessible only to those who have some errand there. The bleak aspect of the grounds of some institutions of this sort is enough to make prospective inmates prefer self-inflicted physical punishment. On the other hand, not a few public institutions are quite famous for their external appearance and the improvement of the surrounding grounds.

As to the location of buildings, it is, of course, apparent that the power houses, laundries, stables, and other accessory buildings should be sufficiently removed from the patients' quarters to cause as little disturbance as possible. Nurses' homes should be as far removed from the scenes of their labors as is consistent with their being reached within a reasonable length of time. The main buildings and patients' quarters should be on the highest point of land, both for the advantages of elevation regarding air and light and for whatever pleasure may be derived from the view of the surrounding country.

Where circumstances permit, facilities should be provided, by the development of natural features, for the necessary recreation for all who live on the hospital grounds. A low marsh should be made into a pool and utilized for outdoor swimming or for some esthetic purpose, either as a water garden, a fish pond, or, if large enough, for restricted boating.

#### Provision for Open Air Sun Baths

An important feature, little used as yet in this country, is the provision for open-air sun baths for convalescents who need the beneficial effects of the sun upon the naked body. In several European countries, notably Sweden, this is common, with fine results, and it should be equally common with us.

#### AMERICAN HOSPITAL ASSOCIATION LISTS U. S. SURPLUS HOSPITAL SUPPLIES

The surplus supplies of drugs, chemicals, and surgical instruments held by the government are now being sold directly to hospitals in case lots according to official information from the Quartermaster's Department recently circulated in a bulletin signed by Dr. A. R. Warner, executive secretary of the American Hospital Association. Lists of the stocks of interest to hospitals are being furnished and all orders should be addressed to Col. L. M. Purcell, chief of Surplus Property Division, Quartermaster's Department, Washington, D. C., accompanied by

certified check for the correct amount. Prospective purchasers are advised to determine carefully their needs and to consider combining with other hospitals in making purchases and splitting cases.

In accordance with its established rule, the government will not make any shipment of less than one original case or package and will not entertain any claim for breakage or deterioration in any package sold. The goods are generally in smaller individual bottles or packages than hospitals usually buy, but the cases are unusually large. Considering the larger containers usually purchased by hospitals, the prices average little more than half the prices now paid for like quantities, and some are considerably less than one-half the present market prices.

It was first suggested that the American Hospital Association take over these stocks and re-sell them to hospitals, but because the cost of handling by a syndicate would increase the price to the hospitals to practically that now paid, this plan was abandoned.

#### SUGGESTIONS FOR HEALTH LEGISLATION

By H. W. JORDAN, Chemical Engineer, Solvay Process Company, Syracuse, N. Y.

Health legislation is becoming popular with state legislatures. The tendency is to model it after fire, accident, and life insurance, which insure,—which protect—against loss of property or life by paying a sum of money to the insured in case of disaster. Such cash payments to offset loss have become so ingrained in our minds that we always think of insurance in terms of money. An example of this is the Davenport Health Bill which was before the New York State Legislature in 1919. The bill contained twenty-seven pages. One page was devoted to medical matters, one page to maternity benefits, and the remaining twenty-five pages to the funds and their administration. The bill was thus 7 per cent health and 93 per cent jobs and money. The only constructive feature it contained was the page relating to maternity benefits.



Kingston Avenue Hospital, Brooklyn, N. Y.

Health insurance can, and should be, of an entirely different sort. Insurance means to make sure. We can make health sure, if we intelligently apply scientific prevention of those conditions which we know are the causes of sickness.

As the Davenport bill did not pass, it is possible to present a bill of genuine health insurance, based on health education and disease prevention, and directed toward developing the highest personal self-reliance and health responsibility of the individual and of the physician. State or federal health legislation should include a definite and increasing proportion of advanced medical research. Sickness should be treated only as incidental to prevention of disease.

As means toward these results, the following suggestions are offered for consideration as sections of a health insurance bill.

**Health Administration.**—Exercise of the authority of health administration should be wholly the function of the State Department of Health. The provisions of the proposed bill should be carried out by that department, with such expansion of its functions, authority, and funds as public interests require.

Health concerns the welfare of every citizen. Legislation regarding it should be state-wide in application and free from class distinction. Health is not a function of the State Industrial Commission, nor of any other state department or commission, except the Department of Health.

**Health Education and Publicity.**—The State Department of Health should conduct permanent and constant work of education by the best mediums of publicity. Education upon all diseases and phases of health and preventive medicine should be maintained, preferably through the principal newspapers of the state. It should be a feature of the Sunday editions. The educational matter should be presented as paid advertisements, supported by a liberal amount of reading matter, the publication of which should be included in the advertising contract. Pamphlets and posters should be used where they are efficient, but the main publicity should be given through the newspaper and magazine press.

Such subjects as venereal disease and prenatal care should be discussed in a scientific, dignified way, with the proportion of publicity which their prevalence requires.

**Annual Physical Examinations.**—An annual physical examination should be required of every citizen, man, woman, and child. The examinations should be made by physicians who have demonstrated their fitness for this work, and should be done with extreme thoroughness. The physician should fill out a standard form covering every detail. In cases where desirable, examinations should be semi-annual or quarterly.

The purpose of the examination should be personal analysis and diagnosis. The person examined should be put upon his own responsibility and referred for treatment to his own physician, or to any group of reputable physicians.

**Dental Examinations and Clinics.**—These should be provided, and examination and cleaning of the teeth required semi-annually. Dental work should receive the conscientious and thorough attention which our knowledge of oral hygiene proves necessary for the maintenance of health.

**Maternity Care.**—Maternity care should be provided, under an arrangement which includes state compensation at two-thirds pay to women in industry, in a manner similar to the compensation for industrial accidents under the State Compensation Law.

**Tuberculosis, Venereal Disease, and Similar Diseases.**—All cases of these diseases in which public welfare requires such treatment, should be put under compulsory treatment, with hospital care.

**Hospitals and Clinics.**—A large part, possibly the major part of the work of the State Department of Health should relate to hospitals and clinics. There should be provision for strengthening all existing hospitals, of standardizing their methods and assuring them necessary financial means. In addition, new hospitals should be built and operated, to meet public needs as they develop.

The same principles apply to clinics. Existing clinics should be enlarged and new ones established, to provide not only for the cities but for towns and rural districts. The clinics should be given authority to assign cases in need of hospital treatment to the city or county hospitals.

**Insanity and Idiocy.**—Measures should be included for control and reduction of insanity and idiocy. The majority of these cases of mental affliction spring from preventable causes, mainly excessive use of alcohol and drugs, venereal disease, and from heredity.

**Nutrition of Children.**—Nutrition of children and allied activities relating to the health and normal physical welfare of children from birth to the end of their schooldays should be assured by a more efficient system of school nurses, with social service nurses working in conjunction with the parents and the state clinics; to the end that child health be fully developed by teaching and maintaining proper nutrition, care of the teeth and all similar attentions, which combined in practical work, assure normal childhood and healthy, wholesome body and mind in maturity.

**Visiting Nurse Service.**—Visiting nurse service should be provided for follow-up attention, particularly among people of moderate means, so that the work of the clinics is supervised at home, to the end that the recommendations of the clinic are faithfully followed by patients.

**Medical Research.**—Scientific medical research should be required. Investigations by such institutions as the Rockefeller Institute should be supplemented by similar investigations of broad, group type, directed toward prevention of disease and conducted through the medium of the public hospitals and clinics; and through the compilation of comparative statistics extending over periods of years.

**Funds.**—The money for this public work should be raised equally throughout the state, without class distinction, and contributed one-third by employers, one-third by employees, and one-third by the state.

**Allotment of the Funds.**—There should be definite percentage allotment of the funds to some sections of the health work, to insure that the most important, though perhaps less popular, sections of it are adequately financed. For example, not less than two, nor more than 5 per cent of the funds should be allotted to advanced laboratory and medical research work and preventive medicine; 5 per cent should be allotted to dental clinics and oral hygiene; 5 to 10 per cent to education and publicity; 5 to 10 per cent should be allotted to visiting nurse service, and 5 per cent to rural clinics. The remainder should be divided as the needs of the work disclose. But these fundamental needs, upon which the entire structure of preventive medicine is built, should be assured their necessary proportion of funds.

Any assigned funds remaining unexpended at the end of the year, should revert to the common fund of the following year, and be allotted to the hospital division, one-half to hospital maintenance and one-half to hospital construction.

**Health Administration.**—State public insurance should be administered wholly by the State Department of Health, working as director and organizer, but not as medical practitioner. So far as possible the work of medical treatment, nursing, dental work, and all else, should be done by the people of the medical, dental, nursing, and similar professions, who should be free to develop their professional work without restraint or competition of the state, but under the impulse of the scientific research which in the past has helped perfect these professions, and which, under the proposed bill, should be advanced to the utmost by scientific research.

Each individual in the state should be made to assume full responsibility for his personal health. Free, or partially free treatment should be given to no persons, except those who are mentally or economically subnormal. An important underlying motive of the bill should be that it develops the personal responsibilities of each citizen and of all physicians in matters of health, to the highest attainable degree.

**Health Education and Publicity.**—The health educational work done during the war by the national Government and the State Department of Health, largely through the medium of posters and pamphlets distributed by manufacturers, has produced excellent results, but the methods were expensive and clumsy, and only a limited part of the population was reached.

The educational work should be conducted mainly through the daily papers, preferably the Sunday editions, and through those magazines of widest state and national distribution. The medium should be advertising, so that the press is properly paid for its work, but supplemented by a generous amount of educational reading matter. Social abuses result from ignorance and secrecy. They cannot exist under full publicity.

To a limited extent, some diseases and health conditions, particularly venereal disease and tuberculosis, can be given effective educational publicity through the medium of posters, and perhaps to a minor degree by pamphlets.

**Annual Physical Examinations.**—The work of the Life Extension Institute has proved the necessity and the value of annual, or more frequent, thorough examinations by reputable physicians. This work should be state-wide.

Although the methods and results would be identical with those of the Life Extension Institute, the state health activities would not injure, but would tend to increase the business of the Life Extension Institute and similar organizations, because people of means would prefer to have their examinations made by organizations with the high standing of the Life Extension Institute, rather than by individual physicians or at public clinics.

**Dental Examinations and Clinics.**—Dental examinations would be included. As the value of dental care is better understood by the public, it is desirable to emphasize dental and oral hygiene by special reference to dental clinics as an aid to the educational character of the legislation. This is also necessary because the profession of dentistry is separate from that of medicine, and is conducted by men who are not popularly recognized as physicians, though they are men of equal scientific standing.

**Maternity Care.**—No argument is needed to convince one of the absolutely vital necessity of highly intelligent maternity care. Two features of American life are arising to overwhelm us. One is the swift decline in our rural population, which threatens to deprive us not only of food, but of country-bred Americans of the best stock. The other,—a city influence,—is decline in the birthrate, with deliberate avoidance of parenthood.

**Tuberculosis and Venereal Disease.**—The necessity of

hospital, and in certain cases compulsory treatment for tuberculosis, venereal disease, and similar diseases, is acknowledged by all who are sincerely interested in promoting public health.

**Hospitals and Clinics.**—Dr. Richard Cabot has stated that among some one hundred fifty recognized diseases, there are less than a dozen that are known with certainty to respond to treatment with drugs; and that the remaining cases are best treated by putting the patient in bed, in a properly lighted, well ventilated room, with abundance of pure water to drink and a moderate amount of simple, wholesome food. In other words, as he says, hospital treatment is the most effective means for restoration of health.

Conditions of city living, and to a large degree those of country life, are increasingly unfavorable to proper treatment of the sick. Not only does the sick person fail to get proper care at home, but his spirits are depressed and his recovery delayed by the routine of the household. The affairs of the home are upset, and the well members of the family become impatient and irritable through the presence of sickness. Financial economy and health efficiency require that we provide far more extensive facilities for first-class hospital treatment than exist at the present time.

**Idiocy and Insanity.**—The cost of the care of the insane in New York State mental hospitals is \$11,000,000 a year. The care of that portion of idiocy confined in our state institutions is \$1,000,000 a year. The total cost is \$7,000,000 a year as only one-seventh of the idiocy is restrained in institutions. These amounts are three to four times as great as they were twenty years ago. The annual total, \$18,000,000 a year, equals one-eighth of the total state budget, and is one-third the amount of the recent state issue of \$50,000,000 of fifty-year bonds for highways. Insanity is 90 per cent preventable. If that efficiency were attained, it would release \$16,000,000 annually in New York State alone. This sum is sufficient to build every year five hundred miles of new, modern concrete state highway, sixteen feet wide, a road from New York through Albany to Buffalo, and back to Rochester.

Insanity and idiocy are expensive luxuries.

**Nutrition of Children.**—Much maudlin sentiment and misdirected public charity are devoted to feeding undernourished children and to other well-meant but ineffective work in child hygiene. These activities should be standardized and made scientifically efficient. Recent experiments in New York and other cities show that undernourished children are quite as common among the well-to-do as among the humble; that under-nutrition and similar child ailments are matters of attention requiring the cooperation of parents, the schools, and the state. Proper nutrition will help reduce the cost of living by teaching the best use of the palatable, cheaper foods. Research by MacCullom and others has proved that nutrition is far more a matter of correct combinations of food than it is of the calorific value or the quantity of food.

**Visiting Nurse Service.**—Visiting nurse service is absolutely essential for the proper maintenance of child hygiene and all work of the clinics. It should cover such diseases as tuberculosis and venereal disease, which are nearly hopeless to bring under control, unless subject to supervision and authority.

Health conditions in the rural districts require visiting nurse service even more than in the city. Visiting nurse work is often regarded as sentimental or ornamental. Actually it is as fundamental as is scientific research.

**Medical Research.**—Scientific medical research has created modern medicine and surgery. Many phases of pub-

lic health do not lend themselves to laboratory investigation, but rather to group and popular study through the medium of statistics, compiled over considerable areas and extending through several years. This type of broad research should be one function of the state. It should supplement intensive investigation upon specific diseases, in the manner of the researches conducted by the great hospitals and by the Rockefeller Institute.

**Funds.**—Public health is not a matter of the industrial employers, nor employees. The funds should be raised from all employers and employees without distinction, and the state, from its general tax levy, should contribute an equal portion, one-third. If the underlying principles of the proposed health legislation be strictly adhered to by concentrating the state work upon health education and disease prevention, and by making each individual strictly responsible for his own physical well-being through the protection of frequent, complete, physical examinations and a thoroughly organized and perfectly balanced system of medical practice available to every person in the state, every one of us, except the few who are mentally or physically subnormal, would be rewarded by so many additional days of health and earning power that we could easily be able to pay all our own health bills. Our state health system would be a pay-as-you-go enterprise, and not a degenerative charity. Its public cost would be mainly that of the State Department of Health organization, with its function that of conducting and directing all health activities, under a progressive, enlightened and scientific system in which each patient, every one of us, pays his own health bill.

**Allotment of the Funds.**—Certain features of the work, such as research, dental clinics, education, and publicity, visiting nurse service, and rural clinics, are necessary to its maintenance and success, though they are not so spectacular and popular as hospital treatment and other features. On account of their importance, they should be assured their proper proportion of funds. This is in accordance with the principles of many highly successful commercial houses, which allot a fixed percentage of their budget or so many cents per ton of product, to advertising, or to similar specific fundamentals of maintenance and growth of the business, such as chemical research.

These ideas are submitted as suggestions for discussion and action, in the hope that the various interests that sincerely desire practical health legislation, rather than class legislation of the Davenport sort, may unite upon a bill and secure its enactment.

### HEALTH INSURANCE\*

By ANDREW R. WARNER, M.D., Executive Secretary, American Hospital Association, Chicago, Ill.

The general impression received by hospital workers and others is that health insurance is an extremely deep and complicated theory and that the application of it to our present society will be almost revolutionary. Although it is easy to understand how this impression is given it is also clear that it is in the main unjustified. The terms social insurance and health insurance are sometimes confused. By the term social insurance is meant any form of insurance which is generally used and which has a direct bearing on the every-day life of people. This, therefore, includes insurance against industrial disease or accident, against unemployment, against sickness, and against any other common or general calamity. Health insurance, then, is a form of social insurance and

is technically the insurance of individuals against sickness and the results of sickness.

The principle underlying health insurance is not different in any way from that underlying any other form of insurance. The public now generally understands the principle of insurance, that it is simply a means of distributing losses, and that each individual must pay a sufficient sum annually to cover, in the aggregate, all the losses incurred by the insured, plus the cost of administration, and, in the case of commercial insurance, a profit to the company. All understand this principle and use it to protect themselves from the crushing loss by fire, or other calamity. We all keep our automobiles insured that the occasional big loss may not fall on us. The same principle is employed to insure against accidents, both "voluntary commercial," which means the accident policy which we personally purchase, and also "public compulsory," or the state industrial accident insurance of many states. There are commercial companies who write policies protecting against sickness; social organizations, as lodges, and other organizations, use this same principle as a service to its members who recognize the need of protection against illness and the advantages from making small monthly payments to secure this protection, yet realizing fully that the accumulation of the monthly payments must meet in full all the losses that are sustained.

### The Points of Controversy

There is nothing new or unusual about the principle of health insurance. All controversies have been over the details of a general or compulsory application. In fact there has been a definite increase in the volume of the commercial health insurance, generally called "voluntary health insurance" in contrast to general or "compulsory insurance." The usual idea is to make the insurance compulsory for all wage earners but the definite plans are often such as to include only those working in groups which means only those engaged in organized industry.

There were at first some questions raised as to the accuracy with which losses could be foretold. However, these have been answered to the satisfaction of all. We know that working men on the average will lose nine days of work annually from illness and 20 per cent of the working men will have an illness each year which will keep them from work a certain time. We know that 65 per cent of those ill more than seven days, the usual waiting period, will be back at work in less than four weeks; that 19 per cent will require from four to eight weeks, 7 per cent from eight to twelve, 6 per cent from twelve to twenty-seven weeks; and that 3 per cent will be ill for more than six months, and 1.29 per cent for over a year. It is, therefore, quite simple to figure out the amount of illness to be expected in a large number of working men. From the duration of the illness and the benefits given it is easy to figure the cost. The general idea is to compensate for loss of earning power as well as the temporary momentary loss.

It is but simple arithmetic to figure the loss from wages; it is possible to figure the cost of medical service comparatively accurately, and, given the governing rule, the extended and permanent loss of earning power can also be figured quite accurately. To those are added the cost of administration and then clear and detail figures for the cost of health insurance for all the working men of a state can be produced. So far, health insurance is simple in principle and the application and operation thereof also seem equally simple.

\* A paper read before the First Michigan Hospital Conference, Lansing, Mich., Dec., 1919.

As health insurance is simply a distribution of the losses, money must be collected from or indirectly for each insured man. Here is the first controversy. There are those who maintain that the working man, if he must pay for health insurance, must be the sole judge as to where he will purchase the same, or whether he will spend his money in this way or not. There is, of course, some justification in the argument that a citizen of this country shall himself determine where he will purchase any commodity and there may be some justification in a claim that a citizen may or may not purchase a commodity as he sees fit. But on the other hand if he does not see fit to protect himself against sickness and a sickness comes to him, the other citizens of this country are compelled by a sense of humanity to make good his loss in whole or in part in the name of charity. The practical question becomes this: if the citizen refuses the opportunity to purchase health insurance and thus carry his own personal risks, he is not playing the game squarely with his fellows and therefore the fellows have the moral right to protect themselves against loss through him by requiring that he protect himself. In order to avoid possible arguments with labor leaders, who are always quick to insist upon the constitutional rights of the laboring man, it is usually planned that the premium for any general or compulsory health insurance be paid, at least in part, indirectly by the employer and a part taken directly from the pay envelope. These plans have the active support of many of the friends and leaders of the working man.

### Some Disputed Questions

In such plans, however, it is quickly realized that the industry is in fact paying for all sickness. This has brought forth from the leaders of industry questions as to the desirability and fairness of taxing industry alone for all the sickness of the working man. Industry has not always looked with favor on the payments for medical services and for loss of earning power in addition to lost wages. Industry has learned that the total cost of medical service depends quite largely on the character of medical service rendered the sick or injured man. It is argued that if industry must pay for medical service and for the resulting permanent disability that industry should have something to say as to the quality of medical service given each insured person. It is also the desire of those favoring health insurance to provide each working man with high-class medical service that his illness may be as short as possible, and permanent disability reduced to the lowest possible amount.

It is quite likely that industry and the advocates of health insurance could agree on this point, but such views have met general and bitter opposition by the medical profession. This controversy in England resulted in the so-called panel system. Under this system the sick working man could employ any physician on the panel for his district. The theory of the panel was that only competent physicians should be placed on the panel, but the practice is to include all reputable physicians. One must admit that it is quite difficult for a state by one decision to license a man to practice general medicine and surgery and say to him by another "you are not competent to take care of state cases." This may indeed seem absurd, yet it is even more absurd to assume that every practitioner of medicine at the time of beginning his work and for ever after, is able to treat with such skill all kinds of illness and all accidents and do all surgery so successfully that illness and disability will be reduced to a minimum. It is true that the development of group practice and ade-

quate institutional facilities will offer middle ground, but these are not yet here. As long as the general practitioner looks upon the persons who seek his advice as "my patients" regardless of the needs of these patients or his own professional ability to render the service needed, industry will naturally shy at any plans which will require it to pay in full for all preventable illness not prevented and for all unnecessary disability.

It has been suggested that this controversy be met by taking a part of the cost of health insurance from sources outside of the industry employing the insured or by general taxation. This only raises the question as to the extension of insurance to others. It must be remembered that the advocates of health insurance have usually limited the scope, including in the compulsory class the wage earners only. Admittedly there are others who should use and would be benefited by the plan. It must be admitted also that there are many now contributing to the tax funds who could in no way receive personal benefit from health insurance. Thus the first controversy has only been changed for a second and less tangible one.

There have been many other controversies of less practical importance, *i. e.*, as to the constitutionality of various provisions, possible and probable malingering, the extension of the protection to the family of the insured, the question of the carriers, state ownership or state supervision, doubts as to the present ability of the hospitals and other medical facilities to carry the load, and others.

### Advances in Group Practice

One by one these controversies will be settled or adjusted and health insurance under some plan will become as general as fire insurance is today. We as hospital people are especially interested. We may expect the development of the same attitude toward the hospital in the case of insured sickness as has come in the case of insured accidents. There is now a general tendency for industry or for the state department responsible for the care of the injured man and for the result of the injury, to favor the care of all cases either by a hospital or by firms of physicians, practising in a working cooperation, which includes men skilled in the care of all kinds of cases. This is simply the group practice of medicine.

Some have attempted to picture the hospital work of an industrial community under a health insurance designed to cover all sickness among the workers. In such a picture three points stand out as fundamental: First.—An extensive increase in the volume of hospital work and a closer working relation between out-patient or ambulatory service with hospital bed service. Second.—A rapid advancement in group practice on the part of physicians in order to compete with the hospital. Third.—A direct and powerful stimulus to all kinds of public health work. The cost of all illness would then be charged to industry, to the people, or to the state in terms of dollars and it will be promptly recognized that it is cheaper to prevent illness than to pay for it. Some regard this as the primary question, conceding at once that it is cheaper and better to prevent illness than it is to compensate the individual for it. Insurance does not lessen the cost: it only transfers the payment to others or distributes it. These argue that if one of the primary benefits of health insurance is to create a general demand for sickness prevention by the general realization of the cost of unnecessary sickness, then why not educate the public in this directly, thereby starting prevention at once and postponing health insurance until the hospitals and the medical machinery have had more time to develop so as to be

ready for change. All agree that the medical profession and institutions are developing rapidly, but that even more development is needed to carry a general health insurance.

Either policy, sickness prevention or health insurance, makes a social program larger than any state has yet attempted, and it is likely that we will develop one at a time. The public health work is already under way and the policy of sickness prevention would require only a further development of existing machinery. But on the other hand, to carry sickness prevention to such a degree as to make it in any way a substitute for health insurance to the individual or in fact to the state, is now practically impossible. The people will not submit to the necessary examination and supervision.

When prominence is given these three fundamental points, conditions will necessarily develop under which the life of the hospital worker will indeed be strenuous. There will be competition between hospitals based upon merit of work. Real records will be kept in a different spirit and with a different intent. Hospitals will become known not for the beauty of their buildings or for the wealth of their endowment but for the percentage of leg fractures they can turn out without a permanent limp, for the number of crushed hands they can save to work again, and for the number of their patients who leave without requiring the services of an undertaker. Demands for hospital "standardization" or improvement will come from without not entirely from within. Hospital administration will become a real specialty in medicine.

In the face of these changes amounting almost to internal revolution, will the hospitals and the hospital people from apathy, lack of interest or understanding, or for any other reason keep entirely away from the committees of the state legislatures trying to solve some of these controversies in the interest of public welfare and to write a health insurance law? We hope not. The predicament of the hospitals under some of the state industrial accident insurance laws tells us too plainly the penalty for such in-action.

#### CAREER OF DR. CHRISTIAN A. HOLMES CLOSES IN 69TH YEAR

After a career of indefatigable activity in his chosen profession, culminating in service of nearly a year and a half in the army cantonment at Camp Sheridan, Ohio, Maj. Christian R. Holmes, one of the most eminent figures in the medical history of Cincinnati, died January 9, at the Post Graduate Hospital, New York City, where he had been a patient for four months. He first entered the hospital for rest and observation on account of a low physical condition supposed to be due to his hard work during the war. After a month, he underwent an operation for appendicitis, and subsequent complications resulted in his death.

Dr. Holmes was born in Denmark in 1857 and received his early education in that country. Later, he studied in Germany and in the United States. He was graduated from Miami Medical College, Cincinnati, in 1886, and served as intern at the old Cincinnati Hospital during 1885 and 1886. His studies in the diseases of the eye, ear, nose, and throat, took him to Holland and Germany.

From 1888 to 1899 he served as ophthalmologist and otologist of the Cincinnati Hospital, and as professor of otology of Miami Medical College from 1890 to 1904. He also served as ophthalmologist at the Laura Memorial Medical College and the Presbyterian Hospital from 1892 to 1903. His contributions to medical literature were generous.

Dr. Holmes also held many offices in medical and allied associations. He was president of the American Academy of Ophthalmology and Oto-Laryngology in 1901 and 1902; vice-president of the American Medical Academy in 1902 and 1903; chairman of the section on laryngology and otology in 1904 and 1905; chairman of the section on ophthalmology in 1905 and 1906; president of the American Laryngology, Rhinology, and Otology Society in 1908



The late Christian R. Holmes, Cincinnati physician, who was a builder of the Cincinnati General Hospital.

and 1909, and a member of the American Ophthalmological Society, American Otology Society, American Laryngology Society, and of the Cincinnati Academy of Medicine.

Skilled in his surgical art, honored by his confreres, and revered by his patients, Dr. Holmes is said to have really first found himself when about a dozen years ago he began the erection of the Cincinnati General Hospital which, together with the Ohio-Miami Medical College, stands as a great monument to a great man. In making himself master of the intricate and complex problems of this great undertaking, he found real self expression. The urge of service to his city, his daring dreams of its future medical needs drove him on in spite of all opposition, and neither political nor financial obstacles stood in the way of final accomplishment. At his own expense, he visited the capitals of Europe to collect data to guide him in planning what is a well nigh perfect institution judged from present day standards. Commissioners from other cities in the United States and in Canada have been sent to Cincinnati with a view to obtaining information for construction of their own hospitals.

The merger of the two medical colleges which was a part of his plan to make Cincinnati the medical center of the West was accomplished in 1909 when they were made an integral part of the University of Cincinnati.

The creative energy of Dr. Holmes was unsatisfied by

the completion of the hospital, and focused on the construction of a great medical college to house the increasing student body attracted to the new hospital. As he could not again go before the people for a bond issue, he proceeded to raise the money among his friends. The building was erected on the hospital site and, like its neighbor, is of modern construction with ample facilities.

In order that these two institutions might maintain their integrity as institutions of learning free from political interference, Dr. Holmes helped to frame the city charter which made the medical department of the hospital a part of the university whose trustees have the sole right to elect the staff and supervise the nursing department.

In connection with his other self-imposed duties, he found time in 1914 to wage a campaign for another bond issue of \$50,000 with which sum were built an administration building, nurses' home, dining hall, children's building, power house, and stables which transformed the old unsanitary branch hospital into a place of beauty.

He was commissioned major in the Medical Officers' Reserve Corps in 1917 and was placed in charge of the eye, ear, nose, and throat department at the Base Hospital, Camp Sherman, where he remained in active service until March, 1919. The hospital had just been erected and its equipment was incomplete, so Dr. Holmes, rather than wait for the slow acquisition of necessities through government channels, purchased them with his own funds. It is estimated that fully 500 draftees were made fit for almost immediate service through his prompt action.

The new Department of Industrial Medicine and Public Health initiated in the Medical College last spring was his latest enthusiasm. Because of his interest in the hospital and college, Dr. Holmes had planned to retire from active practice and devote his entire time to the two institutions. When he realized he must leave his great work unfinished, he wrote letters urging the people of Cincinnati and the faculty of the Medical School to continue to exhibit a firm purpose to carry on in a way that would enlist the support of the Rockefeller and Carnegie Foundations, representatives of both having been interested in the project by Dr. Holmes. Since his death there are those who say that this hope will become a reality with an endowment known as the Holmes Fund in his memory.

Indicative of the admiration which his efforts elicited is the following by Dr. Henry Pritchett, president of the Carnegie Foundation: "For his vision, his untiring energy, and for his clear and sure judgment of medical needs, Dr. Holmes deserves at the hands of his countrymen the highest commendation. That he should be able to bring about in Cincinnati so splendid a result, one in which medical teaching and research cooperate successfully with the public hospital, is one of the great contributions to medical education in America."

## **JOBS FOR NURSES AND NURSES FOR JOBS**

"Jobs for Nurses, and Nurses for Jobs" still remains one of the aims of the Red Cross Bureau of Information for Nurses, as it completes the first year of its organization.

Established in cooperation with the three national organizations of nursing, with headquarters at the port of debarkation, 44 East Twenty-third Street, New York City, and in close communication with the hospitals and institutions in all parts of the United States, the Bureau of Information has been in an unequalled position for service. In its files is now represented information regarding war-risk insurance for nurses, Federal reeducation and hos-

pitalization of sick nurses, and requests for institutional nurses covering a wide range from staff nurse to hospital superintendent. To this Bureau public health agencies present their needs for nurses for infant welfare, mental hygiene, medical social service, school and industrial work. Information will also be given regarding Red Cross Scholarship and Loan Funds for assisting nurses to prepare themselves to enter various phases of the profession which interest them. From the wisest hospital administrator to the youngest high school student who "wants to know how to become a nurse," from the little rural communities in Vermont to the cotton mills of the South, from the hospital wards of New York City to the University of California, where several of its registrants are taking postgraduate courses, the Bureau of Information stands ready to advise you regarding the opportunities which await you.

Will you not write today to the Red Cross Bureau of Information for Nurses, 44 East Twenty-third Street, New York City, New York?

## **WAR DEPARTMENT AND RED CROSS COOPERATE IN HOSPITALS**

The American Red Cross, as an officially recognized branch of the service, will naturally continue its work among the men in service. The War Department has issued an official bulletin embodying the specific requests for the continuance of Red Cross service. Not only will the organization "continue to act as a connecting link between the enlisted men and their families, as during the recent emergency," but it will also continue its work of reconstruction and entertainment in the hospitals.

For the convalescents, the Red Cross will continue to provide leadership for the development of music and of amateur theatricals, will give moving picture shows, concerts and musicales, and will organize and supervise social functions, such as dances. Fruit, flowers, tobacco and cigarettes, and writing materials will be supplied, as well as a full equipment of indoor games, such as cards, checkers, chess, dominoes, and crokinole. Stereoscopes and a supply of photographs, chosen with particular reference to their educational value, will also be furnished by the Red Cross.

Outdoor games of all kinds will be organized, and arranged and modified to suit the needs of the different patients. Such activities as rope-whipping, knot-tying, tree and flower identification, route sketching and signaling will be promoted.

In the wards, in addition to the games and musical and motion picture entertainments, the Red Cross will try to furnish the patients with the newspapers from their home towns, and will continue the distribution of books, magazines and other reading matter.

The communication service, as established in France, and later extended to hospitals in the United States, is to be continued. This service notifies the families of patients from time to time of their condition, writes letters for them, and acts in every way as a connecting link between the sick man and his relatives.

In the Navy as well as in the Army, the Red Cross work will go on, and the same request has been made by the Navy Department for the maintenance of the Red Cross Bureau of Naval Relief Work in ports and hospitals.

The fifty-five base hospital units organized by the Red Cross and turned over to the Army and Navy will be reorganized on a peace basis and put on a reserve list, both for national emergencies and as a measure of military preparedness.

This work with the Army and Navy is of course decreasing as the men are discharged from the hospitals. By the middle of 1920 it is estimated that the fourteen general army hospitals now operating will be reduced to their peace-time number of six or seven. But even with the Army on a peace basis, the need for the special service of the Red Cross will remain, and the organization will take a definite place as a permanent branch of the armed forces of the United States.

"It was a tremendous relief to me in my responsibility in Washington to know that we are going to have an experienced body such as the Red Cross to continue just those activities within the Army camps that we would find the most difficult to accomplish," said Colonel Rees, chief of the Educational and Recreation Branch of the Army. "We can take care of well soldiers, we can organize for that, but the peculiar ability to encourage and raise the spirit of convalescents so that their recovery is certain, is a matter in which your organization is expert, and which we would find most difficult to accomplish without your help. It is a source of great assurance to us to know that this world-wide organization of the Red Cross, which performed miracles during the World War for the benefit, not only of the American Army, but for all armies, and I think we may say for all mankind, is with us in our smaller problems in time of peace, and is going to continue to aid us and be an inspiration to us for work of similar kind which we must now carry forward on our own responsibility in peace time."

## HOSPITALS OF NEW YORK CITY TAKE PROGRESSIVE STEP

As the outcome of a meeting of the staffs of the hospitals of the Department of Public Charities in New York, held at the Academy of Medicine on the evening of January 23, plans were adopted for a review each month of the clinical records of these hospitals by their respective staffs. The medical profession in New York has long been aware that these hospitals maintain adequate case record systems for all patients; also that the laboratories of these hospitals are well equipped, well managed, and dependable. The one thing that remained to do was to institute staff meetings at these hospitals at which clear, concise reviews of what each staff had accomplished for the right care of its patients each month should be fearlessly considered. These staffs agreed unanimously that the time had come for such meetings, and without a single note of dissension, the plan was carried through.

The hospitals represented in this progress are the Metropolitan Hospital, Dr. Walter H. Conley, superintendent; City Hospital, Mr. Charles B. Bacon, superintendent; Kings County Hospital, Dr. John F. Fitzgerald, superintendent; Cumberland Street Hospital, Dr. Jacobs, superintendent; Coney Island Hospital, Miss Maud J. Kean, superintendent; and the Greenpoint Hospital, Dr. Raymond G. Laub, superintendent. The Bellevue Hospital, of which Dr. George O'Hanlon is superintendent, also joined in the plan. The entire group controls about 7,000 beds.

Good will and enthusiasm characterized the entire procedure. Both at the meeting held in the Academy and at other sessions at which the matter was considered, Commissioner Bird S. Coler sought the advice of the superintendents of the hospitals and of the staffs, and when, with the approval of all concerned in the new plan, he issued the order to put the plan into effect, he struck at the very purpose of the hospitals. He began his order

as follows: "Pursuant to the end that all patients in the hospitals under the direction of the Department of Public Charities receive the most efficient care known to the respective staffs of the hospitals, the following orders are issued:"

Following this statement, the Commissioner outlined the plan of the staff meetings. It is to be expected, naturally, that with further experience the data reviewed each month at the staff meetings will be adjusted to the needs of each institution. It is of interest, however, at this time to record the plan with which these hospitals begin their staff meeting programs. The data to be considered each month are as follows:

## ANALYSIS OF HOSPITAL SERVICE

for month ending.....

DISCHARGED

Cured	
Improved	
Relieved	
Unimproved	
To return for secondary operation	
Admitted for diagnosis only	
Deaths within 48 hours	
Deaths institutional	
Released	
Labor	
Newborn	
	Total discharged

## DIAGNOSES

Provisional and final agree.....	
Provisional and final disagree.....	
Discharged with additional diagnosis.....	
Discharged with no diagnosis made.....	
Labor .....	
Newborn .....	
.....	
.....	
Total discharged	

## INFECTIONS

Institutional		On Admission	
Medical .....	.....	Medical .....	.....
Surgical .....	.....	Surgical .....	.....
Obstetrical .....	.....	Obstetrical .....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	Total infections	.....

## CONSULTATIONS

Asked and obtained.....  
 Asked, not obtained.....  
 Indicated, not asked.....

DEATHS		AUTOPSIES	
Medical .....		Medical .....	
Surgical .....		Surgical .....	
Obstetrical .....		Obstetrical .....	
Newborn .....		Newborn .....	
Stillborn .....		Stillborn .....	
.....		.....	
.....		.....	
Total deaths		Total autopsies	

In addition to the foregoing data, analyses are also called for, first, as to causes of death and, second, as to records of patients discharged as unimproved.



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3



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**A** SHORTAGE of forty thousand trained nurses in the United States created a serious situation during the epidemic, and a campaign has been begun to enroll sixty thousand workers. While the epidemic was at its height women who had taken a short course offered in many cities, joined the corps of trained nurses and worked valiantly to check the spread of the scourge. Mobilization of all Red Cross nurses in the southern division was ordered. (Photos by Underwood & Underwood.)

**T**HIS page illustrates some of the reasons why the epidemic of influenza this year failed to take so heavy a toll of human life as it did two years ago. Municipalities, aided by science, have put up a determined fight, with the result that the number of fatalities has been much smaller than when this plague first made its appearance. In the laboratories, white-capped and gowned men and women labor to perfect a serum which will achieve the desired results. This year three-fourths of the population of the world have been afflicted, but owing to a better understanding of how to treat the disease, the number of deaths has been materially reduced. In making experiments in the laboratory, white mice are used to test the serum. Funds are to be provided by Congress, if a resolution which has been introduced is given favorable consideration, to afford specific knowledge of preventive measures.



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## GROUP ACTION HELPS RAISE RATES OF MILWAUKEE HOSPITALS

By C. W. MUNGER, M.D., Superintendent, Columbia Hospital, and Secretary, City Hospital Conference, Milwaukee, Wis.

Milwaukee hospitals in common with those of many other cities, were for years lacking in cooperation, in spirit, and in deed. Being a city of more than a half-million population, Milwaukee has needed and loyally supported its numerous institutions for the care of the sick. Heretofore each of these hospitals has held itself aloof and a spirit almost savoring of competition has prevailed.

The city has eighteen hospitals, not including hospitals for mental diseases, sanatoriums and kindred institutions. They may be divided as follows:

County Hospital .....	1
Municipal Emergency Hospital .....	1
Children's Hospital, private, charitable.....	1
Infants' Hospital, private, charitable.....	1
Maternity Hospitals .....	2
Non-sectarian .....	1
Roman Catholic .....	1
Private General Hospitals .....	10
Lutheran .....	2
Roman Catholic .....	3
Jewish .....	1
Non-sectarian .....	4
County Tuberculosis Hospital .....	1
Municipal Isolation Hospital .....	1

Early in 1919, a series of meetings of hospital people was held at the office of the Commissioner of Health. Out of these, there grew an organization called "The Free Conference of Milwaukee Hospitals." As stated in the constitution the purpose "shall be to confer upon questions of mutual interest to institutions of this character and to cooperate in the interests of hospital needs of the community."

There was some difficulty in the beginning in getting all of the hospitals to participate in the movement. This difficulty, has not at present, been entirely surmounted, but those interested feel that it is only a matter of time until every hospital will be vitally concerned.

### Personnel and Administration

A chairman and a secretary-treasurer are the only officers. The association proper is composed of three representatives of each hospital. The hospital boards may appoint such persons as they desire excepting that the superintendent is *ex-officio* a member. Most of the hospitals are represented by the superintendent, one member of the medical staff, and one member of the governing board.

Monthly meetings are held at which all types of topics are discussed, in addition to a formal program which is prepared by a very efficient committee. Much has been accomplished even in the short time that the conference has been in existence. The question of shortage of pupil nurses has been thoroughly discussed and a committee appointed to put the advantage of the nurses' training schools before prospective high school graduates and other eligible young women. The question as to how to secure and retain good interns has been a topic. Excellent papers on out-patient and social service work have been delivered by representatives of the Milwaukee Children's Hospital. A question box is to be inaugurated and round table meetings are to be held. Future programs are planned on occupational therapy and on hospital medical records.

The association has already taken up the matter of centralized purchasing for institutions. A considerable

volume of information concerning this subject has been collected. Amounts of possible economies are being computed by obtaining estimates from various firms handling hospital supplies. The purchasing department of the city of Milwaukee has offered its assistance and some sort of a purchasing arrangement will, no doubt, be arranged before the end of 1920.

### Group Action

The all important subject of how to meet the constantly increasing cost of commodities has been a live topic in several sessions. Each of the institutions represented has given some helpful suggestions in this regard. By means of group action it has been possible to increase hospital rates for all excepting charitable cases to somewhere near actual cost. Every hospital superintendent has known that increases in rates were justified but few institutions cared to take the initiative in bringing about this change. It was decided at the December meeting that patients under the Workmen's Compensation Act, which requires employers to pay their employees' bills, should not be accepted by hospitals for less than the ward *per capita* of the institution in question. Directors of some of the hospitals took the trouble to explain to heads of large corporations that they, by former hospital rates, had actually accepted charity for their patients who were treated during 1919. Some of these corporations sent Christmas checks to the hospitals sufficient to make up the difference between the amounts they had paid during the year and the hospital's *per capita* cost.

A bright and useful future is a certainty for associations such as this. Milwaukee hospital people are only beginning to learn the value of cooperation and concerted action, as against the previous policy of "splendid isolation."

### ANÆSTHETISTS FORM RESEARCH BODY

Announcement is made of the launching of the National Anæsthesia Research Society, with the avowed purpose of collecting data and prosecuting original research in this field of medicine. The objects of the Society, as set forth in the constitution, are:

"To promote the science of anæsthesia and to enable its members, after first having obtained the approval of the Society, to submit without prejudice to the dental and medical professions, any views, findings, or accomplishments they have attained; to obtain from all available sources such information as is now extant concerning any material, liquid or gas, known to have anæsthetic properties; to arrange, in cooperation with dental, medical, and anæsthesia associations for the preparation and delivery of suitable interesting and educational papers on the general subject, or relative to some particular anæsthetic; to use influence to prevent the publication or circulation of any false or unauthentic statements concerning any and all conditions, symptoms, or phenomena prevailing during or after anæsthesia by any anæsthetic, and to prepare and distribute on request, forms on which such information can be tabulated with uniformity; to distribute by pamphlet or publication, as its funds may permit, and its governing powers authorize, such reliable data as it may collect or obtain through its members or others interested in the subject of anæsthesia, for use by the medical and dental professions; to cooperate with state authorities and other bodies in the preparation of suitable legislation to safeguard those to whom anæsthetics are administered as well as those called upon to admin-

ister them; to use its influence in every way and to give its aid toward the advancement of the Science of Anæsthesia."

The Research Committee which will have supervision of original work and the editing of material designed for the profession and professional press, is headed by F. H. McMechan, A.M., M.D., of Avon Lake, Ohio, editor of the Quarterly Supplement of the American Year Book of Anæsthesia and Analgesia. W. I. Jones, D.D.S., president of the Inter-State Anæsthetists' Association, will have an active part in the committee's work. Representative anæsthetists of the country, who have distinguished themselves by research and progress in their field, are being invited to join the committee.

The Society has been endowed with limited funds which will permit it to demonstrate that there is a field of usefulness for it.

### FILL 730 MEDICAL CORPS VACANCIES IN EXAMINATIONS, MARCH 15

The Surgeon General of the Army announces that preliminary examinations of all eligible applicants for appointment in the Medical Corps, United States Army (regular) will be held on March 15, 1920, at various points throughout the United States, in the Philippine Islands, Hawaiian Islands, Panama Canal Zone, and Porto Rico, and in France, Germany, and Siberia, of applicants in the military service.

The essential requirements for eligibility to take the examination are that the applicant shall be a citizen of the United States, of good moral character and habits, between twenty-two and thirty-two years of age, a graduate of a medical school legally authorized to confer the degree of Doctor of Medicine, and shall have had at least one year's post-graduate hospital internship. The requirement that an applicant for appointment in the Regular Medical Corps shall have served at least a year's post-graduate internship, is waived in the cases of those applicants who have satisfactorily served as commissioned officers for a period of at least one year during the world war.

While the present maximum age limit for appointment in the permanent Medical Corps is fixed at thirty-two years, it is believed probable that by prospective legislation that limit may be modified somewhat in the cases of those applicants who have had military service during the world war, and who are beyond the present age limit. Any such person may, therefore, submit application regardless of his present age, in order that he may be given opportunity for examination, should the suggested change be made prior to March 15, 1920. Applications should be in letter form, addressed directly to the Surgeon General, United States Army, Washington, D. C., and should have embodied therein the following data in the order indicated:

(1) Name in full (initials not acceptable). (2) Date of birth. (3) Place of birth. (4) Permanent home address. (5) Medical school or schools from which graduated, with dates. (6) Professional experience. (7) If an officer who has served during the emergency, complete statement of military service, setting forth (a) the organizations in which served and inclusive dates, (b) present organization, if still in the service, (c) grade in which originally appointed, (d) present grade if still in the service, (e) date, place of discharge, and rank at time of discharge if no longer in the service. (8) Statement of any service as a contract surgeon, in the Medical Reserve Corps, in the Medical Section, Officers' Reserve

Corps, or in the Medical Service in Volunteers. (9) In cases of alien birth, (a) documentary evidence of naturalization, (b) if naturalized through parent, documentary evidence of father's naturalization and sworn statements from two reputable United States citizens establishing relationship between candidate and his father.

At the present time there are, approximately, seven hundred and thirty vacancies in the Medical Corps.

### HARVARD TO AWARD MEDAL OFFERED FOR HEALTH CONSERVATION

A bas-relief bronze medal, the gift of M. Douglas Flattery to Harvard University, has just been received by the university authorities and will be awarded later, in accordance with the terms of the gift, "to the person



The Maurice Douglas Flattery Medal (Photograph by Bachrach)

the President and Fellows of Harvard College may adjudge to have made a discovery in any branch of science that would result in the greatest good to humanity in the prevention of disease or conservation of health in the broadest sense."

The medal, by Frye, is a work of art, as extraordinary as it is beautiful. The face bears the words, "The Maurice Douglas Flattery Medal for the Aid of Science and Health," and the figure of the Muse removing the veil from the Tree of Knowledge. At the right of the figure are the words, "Awarded to—"

On the reverse side is the Tree of Knowledge, while on panels are carried the names of Hippocrates, Aesculapius, Laennec, Harvey, and Pasteur. The gift, but one of a series from Mr. Flattery, was made in 1918, and consists of securities valued at \$7,500, the income from which is to be utilized in providing a medal and \$500 in cash, to be awarded annually by Harvard University to the fortunate discoverer of the greatest benefit to the health of humanity.

### TEN CENTS WORTH OF CURE

A very much overdressed woman came into a dispensary one afternoon. "What is the matter with you?" she was asked. After looking all around the room in a rude manner she replied, "Fot ish de matter vid me? Vel, thot ish fer you and the doctor to find out. Sure I did not pay mine ten cents to tell you where I vas sick, and if you can't find out, then gife me back mine ten cents."

### REPORTS PLANS FOR COMING YEAR

Special efforts will be made to search out unsuspected cases of tuberculosis in the educational campaign to be waged by the National Tuberculosis Association this year. It is proposed to reach every part of the country and impress on the people the fact that tuberculosis is preventable and curable. More than six and a half million dollars will be spent in an effort to prevent the annual sacrifice of thousands of lives.

# AMERICAN HOSPITAL ASSOCIATION OFFICIAL BULLETIN

*Issued by the Executive Secretary*  
ANDREW R. WARNER, M. D., Executive Secretary  
407 Lennox Building, Cleveland, Ohio

## OFFICERS

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## 1920 CONVENTION

October 4 to 10, inclusive, at the Hotel Windsor, Montreal, Quebec.

## 1920 COMMITTEE APPOINTMENTS

### Officers of Sections

#### ADMINISTRATION

Dr. R. B. Seem, chairman, assistant superintendent, Johns Hopkins Hospital, Baltimore, Md.  
Dr. A. C. Bachmeyer, secretary, superintendent, Cincinnati General Hospital, Cincinnati, Ohio.

#### OUT-PATIENT

Mr. John E. Ransom, chairman, Michael Reese Dispensary, Chicago, Ill.  
Mr. Clarence Ford, secretary, superintendent, Division of Medical Charities, State Board of Charities, Albany, N. Y.

#### SOCIAL SERVICE

Miss Imogene Poole, chairman, director of Social Service, Cincinnati General Hospital, Cincinnati, Ohio.  
Miss Alice Rushbrooke, secretary, director of Social Service, Royal Victoria Hospital, Montreal, Quebec.

#### HOSPITAL CONSTRUCTION

Dr. George O'Hanlon, chairman, Bellevue Hospital, New York City.  
Mr. Oliver H. Bartine, secretary, Flower Hospital, New York City.

#### NURSING

Miss Elizabeth A. Greener, chairman, superintendent of nurses, Mount Sinai Hospital, New York City.

### Standing Committees

#### CONSTITUTION AND RULES

Mr. R. P. Borden, chairman, trustee, Union Hospital, Fall River, Mass.  
Dr. James Fyshè, superintendent, Royal Alexandria Hospital, Edmonton, Alberta.  
Dr. W. E. Musgrave, director, University of California Hospital, San Francisco, Cal.

#### NOMINATIONS

Dr. Thomas D. Howell, chairman, superintendent, New York Hospital, New York, N. Y.  
Miss Eugenia D. Ayres, superintendent, Elizabeth General Hospital, Elizabeth, N. J.  
Mr. Daniel D. Test, superintendent, Pennsylvania Hospital, Philadelphia, Pa.

#### LEGISLATIVE

Dr. W. G. Nealley, chairman, superintendent, Brooklyn Hospital, Brooklyn, N. Y.  
Dr. A. K. Haywood, superintendent, Montreal General Hospital, Montreal, Quebec.  
Dr. A. R. Warner, executive secretary.

#### MEMBERSHIP

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Dr. Loring B. Packard, superintendent, Brockton Hospital, Brockton, Mass.  
Mr. H. E. Webster, superintendent, Royal Victoria Hospital, Montreal, Quebec.

#### TIME AND PLACE

Miss Mary L. Keith, chairman, superintendent, Rochester General Hospital, Rochester, N. Y.  
Dr. Harold C. Goodwin, superintendent, Albany Hospital, Albany, New York.  
Dr. A. R. Warner, Executive Secretary.

#### OUT-PATIENT

John E. Ransom, chairman, Michael Reese Dispensary, 1102 Maxwell Street, Chicago, Ill.  
Dr. D. B. Armstrong, Community Health and Tuberculosis Demonstration, Framingham, Mass.  
Dr. Robert J. Wilson, Health Department Hospital, New York City.

# NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,  
Secretary, New York State Board of Nurse Examiners,  
132 E. 45th Street, New York City

## HOW THE PUBLIC IS FOOLED

*The following study of commercial registries for nurses was made by a member of one of the women's clubs of New York City, as a contribution from the club to the legislative campaign of the New York State Nurses' Association. The study was made between January 12 and January 20, so that it represents conditions antedating the epidemic of influenza.*

*The usual fee was 10 per cent of the nurses' earnings for a period of ten weeks, amounting to one week's pay out of every ten weeks' work. It is not difficult to see that this puts a premium on securing as high a rate of pay as possible for each worker sent out.*

*It is to be noted that the registries committed no illegal act. In every instance they were strictly "within the law." It is because the laws are so inadequate that the nurses of New York state are introducing a bill to amend the present Nurse Practice Act. The conditions revealed suggest one reason why there is a shortage of applicants for admission to reputable nursing schools. It is highly probable that similar conditions exist in many other cities of the United States.*

\* \* \* \*

I approached six of the eight chief agencies in the city as a person who had recently returned from the South, where I had seen sickness in army camps. I said that I had had a few months' training in a hospital some fifteen years ago and understood that nurses were well paid in this city, and asked what would be necessary to do in order to be registered by them.

An elderly man was in charge at the first agency, his office being a small, untidy room in what seemed to be a lodging house. He had no application blanks, but said he would like credentials, if convenient. He asked me if I felt competent to do all sorts of nursing, and promised work at once, probably at \$5 per day. Before he asked any questions he drew his book toward him and dipped his pen in the ink. I gave him a name, stating that I had no telephone number at present, but would communicate it when I had one. Five days later I called up to say that I had a telephone number. A woman's voice interrupted me, saying, "Listen, can't you take a case right now?"

I said, "What is it?"

"A pneumonia case on Riverside Drive."

I replied, "I am not ready to go out today."

"Well," she said, "can't you help us out now? Wouldn't you go out tomorrow morning on some other case? We are awfully busy."

No reference of any sort was given at this registry.

\* \* \* \*

At the next registry a shabby and disagreeable woman

was at the desk, which was flanked by a pile of clothing on the floor.

A nurse was complaining loudly about being sent to a case with no money in it.

The woman said to her, "I suppose it was Brown's or Smith's that sent you out on that." That's the kind of thing they do, but I wouldn't."

I asked if I could get \$5 a day on her registry.

"I'm afraid you have exaggerated ideas about New York," came the answer. "You may get \$3 or \$4 a day, but the doctors are asking us right along not to give more than \$35 a week for graduates."

"You can get a pretty good price, can't you, for undergraduates?" I inquired.

To this she replied, "We can only do what Albany lets us do; it keeps close watch, I tell you."

She said they were very busy and could give me work at once, but did not ask me to register. I left no name. When I called up a few days later, the voice stated that it was not necessary to see me for a personal registration if I would fill out their application blank and send it in by the next mail. I gave them the telephone number of a friend but did not send the blank. Nevertheless, this registry telephoned a few hours later, asking me to take a neurotic case on West Sixtieth Street and Fifth Avenue. The woman asked my friend one question only, "Is she very young or very old?"

\* \* \* \*

The next agency was in a private house, and the new clerk could not tell me what credentials were required. They were unable to meet their calls and could practically guarantee work. They had no application blanks. I called up several days later to say I was prepared to register.

The voice said, "Are you ready to go out today? We haven't a single nurse on call now; it is simply terrible."

"What is necessary first?" I asked.

"It is only necessary to know the name of your hospital," she answered, "and to have a reference from one doctor."

She was not willing, however, to send me out until she had seen me.

\* \* \* \*

Brown's agency is a large one, with a reputation for general laxity, where it is said that pupil nurses who have been discharged from training schools have no difficulty in placing themselves at graduates' pay. It is a businesslike place with several men and women clerks.

A man clerk took a registry blank at once as I approached, and said, "Name?" I replied that I would like

1. The names given are fictitious.

some information before agreeing to take cases, and asked how long I must wait for one.

"You can go out at once, as we are very busy and have very few nurses free," I was told. "You would get \$5 a day. Can you give a hypodermic? If you can, you're all right."

"Do you require credentials before sending me?" I asked.

"We take the name of your hospital and get all we need from it."

He pressed more insistently for registration than any one else had done, but did not mention securing the reference called for on the blank which he pushed toward me for signature.

I hesitated, saying that I had not read the conditions on the back before signing, but he insisted, saying, "It is a matter of form only."

I gave him misleading and incorrect information about hospital training.

Two days later he telephoned me and said, "Are you ready to go on a case?"

"What is it?"

After a long delay he replied that he did not know. I think it extremely unlikely that he had any information about me whatever.

The next registry has a building of its own, with well dressed and businesslike women clerks, a surgical dressings department, a diet kitchen—all apparently in a prosperous condition.

The young woman who received me showed the same eagerness to have me register that the other registries showed. She said, "We are so busy that you may go out in twenty-four hours. We require one reference now, and after you have had your first case, four others. You can get \$5 a day. We arrange your fees. You must agree to come to us for your cases, and to take none directly from doctors. We advise you not to register elsewhere."

I asked how I could go out within twenty-four hours if I failed to get one reference in their hands within that time.

"Give us some one with whom we can get in touch by telephone now. It is not necessary to know so much about your work as it is to know you."

"I took care of some influenza patients in a Southern hospital," I told her.

"You are up on hospitals, then, and understand hypodermics?"

"Could you give me pneumonia cases," I asked.

"Yes. You feel able to take them, don't you? The hard cases are paid well."

She advised me not to register until ready to go out on a few hours' call.

\* \* \* \*

The last registry visited conducts a school for nursing. There are two rooms there—a lecture room and what seemed to be a physician's office, poorly equipped with odds and ends of furniture. The school has two terms a year of five months each and two hours of lecture work twice a week. The course consists of forty-four lectures and costs \$60 if paid in installments, or \$55 cash down. A student may enter at any time. There is one textbook of the president's lectures. In return for this a nurse is given all the work she can do, a "nice" pin, and a diploma suitable for framing.

About thirty students register each term. There is no age limit, and there are no educational requirements. The same conditions apply to the students and graduates of the correspondence course.

The president, who gives the lectures, is a pleasant

man, who believes in himself, his theories, and his nurses. He speaks of his school with enthusiasm. His registry for graduates has practically nothing to do, because his highly successful and popular nurses establish their own business connections through patients and doctors. He requires no fees and he sends his undergraduates to chronic and simple cases of illness. In this way they earn about \$20 a week, paying for their education almost from the time of their entry, in case it is necessary. He told me that he placed one girl on the second day of her course. The patients understand, of course, that the student is to have time off to attend lectures.

The education he offers is all theoretical, like a doctor's, and a nurse he trains knows as well how to take care of a patient after classroom demonstration as she would after three years in a hospital. Once he sent a nurse, after his lecture on obstetrics, to a case, in spite of her fear that she would make mistakes. She went, the patient had twins, the doctor was delighted, and engaged her for his own wife's confinement two months later. Many of the well known physicians in the city prefer his nurses because they are more amenable and adaptable than hospital graduate nurses. One of his graduates who had been a waitress before taking his course, writes:

"I want to thank you for urging me to become one of your students. Although speaking English very poorly, I have thought what your school has done for me; been employed during the past year by one of the best registries, hardly having one full day to myself, and my salary has always been \$28 to \$35 per week. In no other way could I ever have accomplished this."

Another one says:

"What do you think! I was called on a pneumonia case. I was so frightened, and I explained over the telephone that I was not competent enough to venture on such a case. But I made an attempt in order to prove to myself how much or how little I knew. On my arrival I encountered three hospital graduates, and of course they looked upon me as another. Two nurses for the day and two for the night, for it was a very serious case, so you see what knowledge I must have gathered from your lectures on pneumonia in that short time to have escaped detection from those trained nurses during the two weeks of my association with them. I also stepped from \$15 to \$25 a week."

#### UNIVERSITY OF COLORADO GIRLS' COURSE IN PUBLIC HEALTH NURSING

A four months' course in public health nursing will be given from March 1 to June 31, 1920, under the joint auspices of the University of Colorado, Extension Division, and the Colorado Fuel and Iron Company, at the Minnequa Steel Works and Hospital, with field work in Pueblo and mining camps. The course will consist of lectures and class recitations, together with field work. The course is accredited by the National Organization for Public Health Nursing and the American Red Cross. Although a limited number of senior pupils from accredited schools of nursing will be accepted, applicants, generally speaking, should be graduate nurses of accredited schools of nursing. For information regarding this course, communications should be addressed to Miss Mary B. Eyre, director, Minnequa Hospital, Pueblo, Colo.

During the war the American Red Cross furnished 294,000 splints for American soldiers. It also supplied 4,340,000 gallons of nitrous oxide and oxygen to French hospitals.

## DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR.  
Director, Boston Dispensary, 25 Bennet St., Boston

### ORGANIZATION, ADMINISTRATION AND EQUIPMENT OF DISPENSARIES\*

A Report Made by the Public Health Committee of the New York Academy of Medicine.

#### Part II

(1) *Dispensary Hours.*—Although it is generally conceded that dispensary hours should be adjusted as far as possible to meet the requirements of wage earners, school children, and housewives, it has been found to be practically impossible to meet the convenience of all concerned, including the physicians. The doctor in private practice finds it possible to give his time to dispensary work during the day, but is reluctant to give up his late afternoon or evening office hours. On the other hand, for the patient employed in gainful occupation, or the child attending school, it is difficult to attend clinics at the hours at which they are usually open.

In view of the fact that unpaid medical service is the rule, rather than the exception, it has been necessary for the dispensaries to adjust their hours, as far as possible, to meet the convenience of the physicians, rather than the patients. Of all the dispensaries in the city, only thirteen have late afternoon clinics. Among these are such special institutions as the Clinic for Speech Defects and the Clinic for Functional Rehabilitation. In the other institutions, only certain departments have clinic hours until five p. m. In addition to the tuberculosis clinics, there are in all not more than ten institutions maintaining evening clinics. Three general dispensaries conduct evening cardiac clinics; two, evening genito-urinary clinics; two, a mental hygiene clinic; one, a clinic for diseases of women, and one a chiropody clinic. The Clinic for Speech Defects is also open in the evenings.

The hours for day clinics vary widely, all hours of the day from nine in the morning to four in the afternoon being used. Morning hours from ten to twelve, and afternoon hours from two to four, are the most frequent. Physicians in private practice ordinarily find it most convenient to have office hours in the morning before ten o'clock, from twelve until two in the afternoon, and from six until eight in the evening. Dispensary hours have therefore been adjusted largely to meet these conditions.

\*Part II of the first chapter of the report made by the Public Health Committee of the New York Academy of Medicine on the Dispensaries of New York.

#### OUTLINE OF ORGANIZATION, ADMINISTRATION, AND EQUIPMENT OF DISPENSARIES

- (1) *Dispensary hours.*
- (2) *Prevention of over-crowding and long waiting periods.*
- (3) *Exclusion of contagious disease cases.*
- (4) *Surgical operations and facilities for the care of patients.*

The experience with evening clinics has not been sufficient to enable one to form a fair judgment as to the demand for them. In the house-to-house canvass made in several sections of the city, and among various racial groups, by the agents of the Public Health Committee, the great majority of people expressed themselves in favor of evening clinics. The evening pay clinic, as well as the evening free clinic, of the Brooklyn Hospital Dispensary, has been well patronized and successful in every way. Evening clinics for the treatment of genito-urinary diseases and diseases of women have been very successfully conducted at the Demilt Dispensary, and have grown steadily in patronage. The evening cardiac clinic at Bellevue Hospital has also proved successful; so have the evening mental hygiene clinic at Cornell and the evening class at the Clinic for Speech Defects. The evening clinics for tuberculosis and cardiac cases at Gouverneur Hospital Dispensary were discontinued after a short trial, because of the lack of available physicians for evening work, although the evening tuberculosis clinics elsewhere

have been entirely successful.

The dispensary superintendents interviewed in connection with study were, with few exceptions, in favor of evening clinics. Without any more definite program for compensating physicians, however, than is now in operation, it would be extremely difficult to induce a body of competent physicians to give time in the evening. If adequate salaries were paid, or if a definite program of promotion were provided, either with or without compensation, the service would no doubt be sufficiently attractive to physicians.

The operation of evening clinics presents no serious difficulties beyond securing adequate medical service and meeting the additional cost which would be entailed. It would be necessary, therefore, to require somewhat larger fees for evening service, or even to make some of them self-supporting "pay" clinics.

(2) *Prevention of Over-Crowding and Long Waiting Periods.*—Lack of adequate clinic space, insufficient personnel of physicians, nurses, and clerical assistants, tardiness of physicians, lack of system in examining patients, and inadequate equipment for such examinations, cause frequent delays in getting work done in the clinic rooms, and these delays are reflected in the clinic waiting room, in the general waiting room, and at the admission desk. Sometimes the admission desk is responsible for the delay, as at one of the special institutions where the admission

room is so small that patients have to stand in a line which at times extends out upon the sidewalk for a considerable distance, while the registrar interviews each patient at some length. In the majority of instances, the causes of delay are chiefly in the clinics themselves. In many dispensaries delays are frequent and unusually long because of the failure of physicians to come promptly at the hours; at the Lincoln Hospital, the New York Hospital, Bellevue, and the Harlem Hospital, delays are frequent and long because of the lack of space in the clinic rooms. In some instances waiting periods are unnecessarily frequent and long because the physicians have not assistants to prepare patients for examination and to take histories. Several years ago the waiting period was reduced at Mount Sinai by the adoption of the principle of limitation of numbers. The maximum number of cases which could be handled in each department was ascertained, based on the average length of time customarily allowed for new and old cases, and the number of physicians on duty in the given department. When this maximum number is reached, further applicants are refused admission on that day. It has reduced over-crowding to a very large extent, but involves a considerable degree of inconvenience and uncertainty to the patients.

#### Appointment System Not Practised

Nowhere is the system of "appointment" practised, first, because it necessitates the employment of a clerical staff to make the appointments with the patients; and second, because it is stated that it would be difficult for a large number of the dispensary clients to keep the appointments. The first reason seems to constitute the great difficulty in the attempted solution of one of the most vexing problems of dispensary administration, by this method. With the meager sums at the disposal of the out-patient departments, the payment of salaries to the necessary clerks would be a serious financial burden. With regard to the second reason, under a proper working plan the failure of some of the patients to keep appointments would not be a cause of disorganization. The presence of the clinic secretaries at different hours at the dispensaries would make it possible for the patients to arrange for consultations at times convenient to them, and would be conducive to a smooth operation of the clinics, provided the physicians were punctual in their attendance. The method received a trial in the children's clinic organized by the American Red Cross at La Havre, under the direction of Dr. Edwards A. Park of Johns Hopkins Medical School. The following is an extract from Dr. Park's description of the plan, as published in the August, 1919, issue of *THE MODERN HOSPITAL*:

#### Red Cross Plan in France

"Children brought to the dispensary during its period of regular session were either seen by the doctor at once, or given definite appointments for the same day or for some subsequent day; in other words, patients applying for treatment were received exactly as they would have been by a busy private physician. The assignment of hours for the appointments was in charge of one person, the dispensary clerk, who kept the daily register and acted in the capacity of a secretary in the office practice of a private physician. Her desk was so placed that patients entering the dispensary naturally passed before it. On her desk lay the calendar containing the list of appointments for the day and for succeeding days.

"The appointment system, as employed in our dispensary,

was carried out in the following manner: a child applying to the admitting clerk for examination was given an appointment immediately, if one of the ensuing periods on a doctor's schedule was free. If such a period was not free, the action of the dispensary clerk was governed by the urgency of the case. If immediate examination was necessary because of the illness of the child, or the inability of the parents to wait or to return, or for some other reason, the child was registered immediately, and then sandwiched in between two cases having regular appointments. If the case was not urgent, the appointment lists were consulted to determine the free periods, and the parents were allowed to select the one most convenient. A doctor was always at the disposal of the dispensary clerk to determine the urgency of the case from the medical standpoint.

#### Doctor Makes Reappointment Date

"After the consultation, the date for reappointment was, of course, always made by the doctor, who alone was conversant with the patient's needs, and was communicated by him in writing to the clerk, at the bottom of the treatment slip. Only the date for reappointment, however, was arranged by the doctor. The hour was always determined by the dispensary clerk after consultation with the patient and examination of the appointment lists.

"When the dispensary clerk had fixed upon the appointment hour most suitable to the patient, whether the patient was a new case or an old one, she entered it, with the date, on the reverse side of the dispensary card which the patient was to take away with him, and then wrote the patient's name and number under the corresponding date on the appointment calendar.

"Appointments were made to fall due on the hour and the half hour. If the case was a new one, a half hour was regularly allotted to it, and ordinarily no other assignment was made for that half hour on the doctor's schedule. If, however, the child had been seen previously, particularly if it was thought that little time would be required for examination and treatment (e. g., feeding cases returning frequently), other old cases were assigned to the same half-hour period. Ordinarily, no appointments were made on the doctor's schedule between eleven a. m. and one p. m., or between four p. m. and five p. m., in order that there might be some time free for emergency cases. Thus it was possible to examine the great majority of new patients on the day of application.

#### Advantages of Appointment System

"The advantages of the appointment system are so obvious as to require little comment. Perhaps the most important result from it in our dispensary was the saving of the patient's time and, therefore, of his money. The day's wage is of as much importance to the dispensary patient as the day's income to the dispensary doctor; its steady flow is often a matter of vital importance. Yet the dispensary system generally in use, according to which the patients are obliged to assemble before nine a. m. or two p. m., and then to wait often the whole morning or afternoon, implies that the time of the dispensary patient is of so little value that it may be almost disregarded. The truth is that the modern dispensary is conducted, primarily, with a view to the convenience of the dispensary physician, on the principle that it is better for forty patients seated on the benches to lose sixty hours' time, than for the doctors to be subjected to the possi-

bility of losing one-half hour's time. As everyone who has worked in children's dispensaries knows, many a parent who finds himself obliged to sacrifice his day's wage, or, if he works at night, his day's sleep, will not bring his child to the dispensary. Yet such a parent will bring his child to meet the doctor on a day and hour found to be mutually convenient.

"In fact, as applied to the dispensary, the appointment system not only causes no loss of time to the doctor, but brings about the very best utilization of his time by producing a more even distribution of patients throughout the dispensary day and week. The avalanches of patients which descend on Mondays, on the days following holidays, or the first pleasant day after a period of bad weather, can, to a great extent, be anticipated, or held and distributed. The doctor thus avoids the frequent necessity of abandoning all careful consideration of his cases in an effort to get rid of them as rapidly as possible. Furthermore, the assembling of crowds of children is obviated, exposure to contagious diseases minimized, and noise and confusion, the two attributes of children's dispensaries, greatly reduced.

### Unpunctuality Caused Crowding

"From what has been said, it must not be thought that the appointment system always worked perfectly in our dispensary and at once freed us from all the ills of the old system. Waiting and crowding occurred, but, relatively speaking, to a limited extent. Sometimes when groups of patients collected, the fault was with the patients who had come late; almost always, however, it lay with the doctors who were late themselves, or fell behind their schedule as a result of some emergency or for some other reason. When the system worked perfectly there were not more than six patients in the waiting room at any one time during the day. On several occasions visitors have remarked, 'You have closed?' when, in reality, more than fifty patients were being seen in the course of the day.

"If the dispensary patient paid a fee to the dispensary doctor, in other words, if the dispensary doctor had been compelled by his own selfish interests to recognize the convenience and economic necessities of his patients, all dispensaries would have been operated on the appointment plan long ago. There is no reason why a dispensary created for the benefit of the poor should not be conducted from every point of view to their advantage."

### Occupation for Waiting Patients

With one exception, in none of the dispensaries studied was there observed an effort to utilize the waiting time of patients or to occupy them while they wait. The extent to which the waiting time of patients can be used for their instruction or employment is problematical. Certainly there is warrant for believing that if long waits cannot be avoided, some way can be found for occupying the time so spent. Instruction of patients in the rules and regulations of the dispensary would perhaps promote more efficient coöperation between the physician and the patient. Each new patient might be given a leaflet of simple instructions regarding such matters as promptness in attendance, attitude toward other patients and toward physicians and nurses, deportment in the dispensary, care and use of dispensary property and conveniences, and necessity of following orders of physicians and nurses.

The possibility of giving special talks to large groups in the general waiting rooms is worthy of trial, although

the difficulties of such a procedure are obvious. The group is changing constantly, and the talks would have to be brief and of such a nature that they would not interfere with the regular dispensary routine.

Health exhibits on the walls of the waiting rooms, with pictures or charts large enough to be seen from the patients' benches, would be of value, but it would, of course, interfere with the orderly conduct of patients to install exhibits which require close inspection and necessitate having the patients leave their seats. Posters of various kinds, such as have been used in the several war "drives" or loan campaigns, have proved their value. An exhibit of wax models of food, with their relative nutritional values and costs plainly shown upon cards, was noted in the children's clinics at the Post-Graduate, Bellevue, and Polhemus Clinics, and considerable interest is shown in the exhibits.

At the New York Hospital, where the patients are often required to wait for inordinately long periods, an attempt was made to employ them in making dispensary supplies. This was not successful, however, and the patients are now advised to bring something to read or knit. In certain other dispensaries, with perhaps a more adaptable clientele, such an experiment might be successful, but there is little experience on which to base judgment on this point.

### Contagious Disease Suspects Isolated

(3) *Exclusion of Contagious Disease Cases.*—The institutions included in this study all provided for the isolation of suspected cases of contagious disease, although many of the dispensaries had no special isolation room. In these instances a vacant clinic room or other room was utilized for the isolation of the suspects. At no dispensary, however, is there a satisfactory method of detecting suspected cases before admission, except in the two institutions where the chief physician is regularly on duty at the admission office. If the signs of contagious disease are sufficiently obvious, the experienced registrar may detect them, but in many instances contagious disease is in its incipient stage, and is not detected until the patient reaches the clinic room. At Mt. Sinai this work is being done by a trained nurse specially assigned to this task and the arrangement is reported to be satisfactory.

Complete enough records are not available in the various dispensaries to permit a determination of the frequency of admission of cases of contagious disease. The consensus of opinion of dispensary administrators is that few cases of contagious disease escape detection at the admission desk, but our observation does not substantiate this belief. It would, however, be highly desirable to have complete records kept on all cases, as the possibility of contagion being spread in the crowded waiting halls or clinic rooms of dispensaries is not altogether remote. Such records would be helpful in determining whether or not greater diagnostic skill at the admission desk is warranted.

### Over-Night Care of Patients

(4) *Surgical operations and Facilities for the Care of Patients.*—The dispensaries which are connected with hospitals arrange for the care of minor operative cases requiring general anesthesia and observation during recovery, by referring the patient for admission to the indoor service. Vanderbilt University, Bellevue, and St. Bartholomew's clinics are the only three dispensaries having no hospital affiliation which have facilities for the over-night care of patients. Cornell Dispensary patients re-

quiring general anesthesia and bed care after operation are referred to the Cornell Division of the Bellevue and Allied Hospitals, at the discretion of the surgeon. The Demilt Dispensary, the New York Dispensary, and the Brooklyn City Dispensary do no operative work if, in the opinion of the surgeon, observation of longer duration than the clinic period is required.

Although there is evidence in the available records of the dispensaries studied to warrant the assumption that patients operated upon in the clinics do not receive proper after-care, there is a lack of uniformity of procedure because the determination of what should or should not be undertaken in the dispensary is left largely to the discretion of the surgeon to whom the case happens to come. There are no general rules in dispensaries with regard to procedure. The recommendations of the Surgical Section of the Associated Out-Patient Clinics, formulated several years ago, constitute the only available attempt at standardization and general guidance and are herewith reproduced:

"The decision as to whether an operative case is an out-patient or an in-patient should be rendered by the chief of clinic.

"(a) *Anesthesia*.—(1) In all cases where possible, local anesthesia should be used.

"(2) All cases for anesthesia should first be referred to the surgeon in charge for his examination, or in his absence, to the first assistant. In all cases in which general anesthesia is used, a suitable recovery room must be provided and the patient must have the services of a nurse until out of the influence of the anesthesia.

"(b) *Fractures*.—(1) Ambulatory fractures may be treated in the out-patient department, provided open operation is not necessary.

"(2) The services of a radiographic department to furnish sufficient skiagraphs for the treatment of fractures should be afforded to the out-patient clinic. This department should, if possible, be in close proximity to the out-patient department, in order that fluoroscopic examination may be made, if deemed necessary.

"(3) There should be available materials for splinting fractures, and in addition, the services of a competent brace-maker should be secured in cases for which such services may be necessary.

"(4) There should be, either in conjunction with the out-patient department or connected with the hospital, and open to patients from the out-patient department, a department of massage, mechano-therapy, hydrotherapy, and hot-air treatment for the treatment of convalescent cases.

"(c) *Operative Cases*.—(1) The permission of the surgeon in charge, or, in his absence, that of the surgeon designated by him, must be obtained in every operative case.

"(2) Lumbar puncture for diagnosis and the injection of salvarsan should be performed only in clinics in which facilities are provided for keeping patients in bed for at least twenty-four hours.

"(3) In those clinics in which the Laryngological Department is under the control of the Surgical Department, cases of tonsils and adenoids shall not be operated upon except under general anesthesia, and unless facilities are provided for keeping patients under observation in bed for at least twenty-four hours.

"(4) Cases that have been operated upon should be visited when necessary by the visiting nurse, and her records and report attached at once to the history of the patient. An immediate report should be made by the visiting nurse to the operator personally, or by telephone,

should the nurse, in her judgment, consider it necessary that the patient should be visited by a doctor from the out-patient department, or admitted to the hospital."

## AMERICAN CONFERENCE ON HOSPITAL SERVICE MEETS IN MARCH

The next meeting of the American Conference on Hospital Service will be held at the Congress Hotel, in Chicago, Wednesday and Thursday, March 3 and 4, following the meeting of the Council of Medical Education.

It is hoped that by this time committees will be sufficiently organized to submit policies for discussion and permit the formulation of a definite program of work.

## SCHOOL CHILDREN AID IN WAR

Through the Junior Red Cross, the school children of America during the war produced 15,722,078 relief articles to an aggregate value of \$10,152,461. The following table shows in figures the quantity and money value:

	Quantity	Value
Surgical dressings .....	6,057,720	\$ 363,463
Hospital supplies .....	2,574,564	772,369
Hospital garments .....	444,776	578,208
Refugee garments .....	1,130,188	1,808,300
Articles for soldiers and sailors...	3,174,999	5,238,748
Sewing for convalescent and nurses' houses .....	138,345	69,172
Sewing for camps.....	1,444,507	722,253
Furniture for convalescent and nurses' houses .....	70,084	404,384
Furniture for army.....	666,445	193,341
Miscellaneous furniture .....	20,450	2,219
	15,722,078	\$10,152,461

The United States Steamship "Relief," now in course of construction at the Navy Yard at Philadelphia, Pa., was launched December 23, and will be completed some time the latter part of the summer. The ship is of the twin screw type displacing about 10,000 tons, is approximately 483 feet long, with an extreme breadth of sixty-one feet and a speed of sixteen knots. The hospital compartments will accommodate about 500 patients, being of a size comparable to the largest metropolitan hospitals, with roomy clear deck spaces for convalescents. It will be an oil burner free from the dust and other disagreeable features of coal burning vessels. In addition to the ordinary hospital equipment, it will carry in the hold a complete field hospital equipment, including ambulances so that necessary advanced base hospital equipment can be landed on short notice in case of a national calamity such as Baltimore fire, the San Francisco earthquake, or the Galveston tidal wave.

He had just hung out his shingle. That morning a stranger entered. The doctor asked to be excused as he hurried to the phone.

Taking down the receiver. He said: "Yes, this is Dr. Whoosit. Yes, I will be ready for you at two-ten this afternoon. But please be prompt for I am very busy. Two hundred dollars? Yes, that was the estimate I gave you."

Hanging up the receiver, he turned to the stranger and, rubbing his hands, asked: "Now, sir, what can I do for you?"

"Nothing," replied the stranger quietly. "I only came in to connect up the telephone."—*Oral Hygiene*.

## DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU GRAVES,

Home Economics Bldg., Cornell University, Ithaca, N. Y.

### COMMERCIAL SYRUPS

By JOHN PHILLIPS STREET, Indianapolis, Ind.

*Cane Syrup, Maple Syrup, Corn Syrup, Maltose Syrup, Sorghum Syrup.*

The present sugar shortage and the attendant high prices of this valuable sweetening agent threaten serious consequences as affecting the health and proper nutrition of our people. To the normal human being sugar of some sort in the diet is a virtual necessity. While excessive use may cause digestive disturbances, and while under certain pathological conditions its use is contraindicated, the fact remains that when sugar is excluded from or unduly limited in our diet we feel the limitation keenly and our perfectly normal longing for sweetness in our foods is unsatisfied.

In this connection a word of warning should be uttered against the use of saccharin, now widely advertised as a substitute for sugar and acclaimed as a solution of the problems arising from the present sugar stringency. It cannot be denied that saccharin has sweetness, in fact it is from four to five hundred times sweeter than cane sugar; but this sweetness is its only quality which would entitle it to any consideration as an ingredient of our foods. Saccharin is a food in no sense; it is a coal-tar product upon which the metabolic processes of the body have no effect. It passes through the body unchanged, contributes not one calorie to the body's fuel and energy requirements, and has not the power to construct even one microscopic cell of body tissue. Its use simply satisfies the human craving for sweetness, and in this property lies one of its main dangers. The value of sugar lies not alone in its sweetness, but also in that it supplies an easily digested, assimilable, nutritious element to our diet, and to supplant this with saccharin is to confound sweetness with nourishing properties, and to substitute an inert coal-tar product for one of the most valuable foods God has given us. The Federal Government has ruled that saccharin is detrimental to the health of the user when used even in relatively small quantities and forbids its use in foods except in a limited number of products prepared for the use of diabetics and those suffering from obesity and kindred diseases. In the judgment of the writer, however, the chief objections to the use of saccharin in food are the commercial deceit that follows, the reduction in the nourishing value of the foods which contain it, and the unfair competition to which the honest purveyor of wholesome and nutritious foods is subjected. Saccharin has no place in the dietary of a well human being, and even when sick of a disease where sugar in the diet is objectionable, even then the patient should use saccharin sparingly and only under competent medical direction.

But to revert to real sweetness. It is unnecessary and undesirable at this time to discuss the chemistry of the various sugars. The best known sugar, of course, is cane sugar, sucrose, which is obtained commercially from the juices of the sugar cane, sugar beet, and the sugar maple. Dextrose is another well-known sugar, which comes to us commercially as an ingredient of corn syrup (glucose syrup). It is also found in certain dried and ripe fruits and in honey. Maltose is a sugar developed in the malting of various grains, while levulose is a sugar found in many fruits and is an important constituent of bee's honey. Milk sugar (lactose) is found in milk to the extent of 4 or 5 per cent.

Cane sugar exists as such in the cane and beet, and the manufacturing process is chiefly concerned with its clarification and the removal of impurities. Cane sugar is also present in maple sap, but in the preparation of maple sap and maple sugar certain "impurities" are purposely allowed to remain to secure the peculiar flavor because of which these products are so highly esteemed. Likewise the levulose in fruits and honey exists there as a true sugar. On the other hand, commercial glucose and maltose are not natural sugars, in that they do not exist preformed in the grains from which they are obtained; they are obtained by the action of dilute acids or diastase upon starches, the starch molecule being broken up and dextrose or maltose resulting.

Generally speaking, from the standpoint of nutriment there is little choice among the sugars named above. They are all nutritious, easily digested, easily assimilated, and all yield essentially the same amount of energy to the body. Milk sugar is perhaps the most easily digested and is, therefore, particularly valuable in the diet of children.

If sweetness alone is sought after, it will be found that these sugars show important differences. Assuming the sweetness of cane sugar (sucrose) to be 100, that of levulose would be 150, maltose 60, glucose (dextrose) 50, and 40 per cent glucose (corn) syrup 20. Levulose as such scarcely comes into commercial use and may be dismissed from our consideration at this time. Of the common sugars, sucrose, dextrose, and maltose, sucrose is by far the sweetest. Naturally, therefore, a smaller quantity is needed to secure any desired degree of sweetness. Twice as much dextrose would be needed to equal the sweetness of any given amount of sucrose, but it must be recognized that the use of this quantity also practically doubles the nourishing value of the product to which it is added.

Syrups are essentially solutions of one or more sugars in water. Sugar is their costly ingredient and it is fitting, therefore, that a minimum density should be insisted upon in the commercial products sold to the public. A minimum of from 65 to 68 per cent of solids is the usually accepted standard of density for these products. The

syrup solution cannot be too concentrated or the sugar will not keep in solution and an unsatisfactory product will result.

Cane syrup is made from the juice of the sugar cane. This syrup is clarified and purified and, correctly or not, the public has grown accustomed to judge a syrup largely by its color. In cooking, a darker product is often preferred, but for table use a light-colored, golden-yellow syrup finds most ready favor. It must be remembered, however, that a brown color to the syrup does not necessarily indicate poor quality. A home-made cane syrup may be made by simply dissolving either white or brown sugar in boiling water. A little burnt sugar (caramel) improves the color and flavor of such a syrup.

Molasses is really a form of cane syrup, of much darker color and generally of heavier consistency. It is less highly refined than cane syrup, and its characteristic flavor gives it special value for many cooking purposes. Molasses from the sugar beet is rarely used for table purposes, as it contains impurities which give it an objectionable flavor.

#### Syrup Made from Sorghum Plant

Sorghum syrup is made from the juice of the sorghum plant and is a popular food in certain sections of the country. In some districts it is the practice of the farmer to grind his own sorghum and make therefrom his own supply of syrup. Such a syrup as a rule has a distinct flavor, highly esteemed by some, but not always appreciated by the general public. Sorghum syrup is a perfectly wholesome food and with improved manufacturing processes may ultimately fill an important place in our dietary.

Glucose (corn) syrup has long been a fertile source of controversy, chiefly because in its early career it was too commonly used as a substitute for cane sugar in food products without advising the consumer of that fact. At the present time, however, it is sold on its own merits and is a valuable contribution to our food supply. It is a wholesome, digestible product and is particularly acceptable to those to whom the greater sweetness of cane syrup is objectionable.

Maltose syrup as a commercial article is now assuming considerable importance, and doubtless in time will be a formidable competitor of the better known syrups. Such samples as it has been the writer's privilege to taste have shown a peculiar malty flavor quite agreeable to him, but perhaps not acceptable to all palates.

#### Origin of Maple Flavor

Maple syrup is the most highly esteemed and the highest priced common syrup. As already stated, it derives its peculiar flavor from certain impurities of the maple sap which are allowed to remain. Its sugar is identical with the sucrose of that from the cane or beet root, but in maple sap it is associated with certain non-sugar substances which give maple sugar its peculiar and desirable flavor. Just what these substances are is not clearly known, but probably certain esters of malic and other acids are chiefly responsible. This flavor is sometimes simulated by concoctions from corn cobs or hickory bark, but of course such preparations have none of the delicacy of genuine maple syrup. A mixture of maple and sucrose syrup, or one of maple and corn syrup, is not the genuine article, and when these substances are declared on the label the consumer must not expect to obtain true maple syrup.

All the genuine syrups on the market at the present

time are wholesome products, the nourishing value depending chiefly upon their concentration. The delicate flavor of maple syrup will always be esteemed and will command a higher price, but when simple nutriment is desired, cane syrup offers a valuable, much cheaper substitute, and if a lesser degree of sweetness is preferred, corn syrup is cheaper yet and in every way just as wholesome and nutritious.

#### NEWS NOTES OF DIETITIANS

Miss Eleanor Muth has accepted the position of dietitian in the Robert Packer Hospital, Sayre, Pa. Miss Muth is a graduate of the University of Illinois and has recently finished a course of student dietitian training at New Haven Hospital.

Miss Ruth Oerter, formerly dietitian at the Olney Sanitarium, Olney, Ill., is now dietitian at the Braddock General Hospital, Braddock, Pa.

Miss Laura Conaway, a graduate in home economics from the University of Iowa, who has recently completed a course in hospital dietetics offered at Michael Reese, has just accepted the position of dietitian at the Stuart Circle Hospital, Richmond, Va.

Miss Ruth Gubtil has recently gone to the Grace Hospital, Detroit, Mich., as dietitian. Miss Gubtil was previously at the Harper Hospital, Detroit, in the same relation.

Miss Ruth Pollock is teaching domestic science in the schools of Delaware, Ohio.

We feel sure that the dietitians of the entire country regret that Miss E. M. Geraghty has severed her connection with New Haven Hospital. Miss Geraghty had developed a superior course of training for dietitians, together with an affiliation with Yale Medical School, which made every one pleased with the high standard of work accomplished there. It is to be hoped that this same valuable service may be continued in some other place, and that we shall not lose the inspiration which Miss Geraghty has given to the profession.

An association of dietitians has been formed in Pittsburgh, Pa., with a membership of nearly twenty at the beginning. The officers of the organization are as follows: President, Elizabeth Powers, Allegheny General Hospital; vice-president, Marguerite Bennett, Western Pennsylvania Hospital; secretary, Wanza Zimmerman, Parkview (Government) Hospital; treasurer, Helen Hooker, Presbyterian Hospital. One great evidence we have of the earnest and enthusiastic attitude of dietitians toward their work is this tendency to get together and to use every opportunity to learn what others are doing. We are much impressed with the optimism and perseverance shown in the face of difficulties, and few people in the hospital or elsewhere are facing more or greater obstacles than the dietitian today; she has both of the great bugbears to meet—the high price, and labor problems—and we are constantly hearing hospital executives express their appreciation of the way she is meeting them.

The Home Economics Association of Philadelphia, Pa., held its regular monthly meeting January 15 at the Widener Library. The Dietitians' Section of the Association had charge of the meeting. Many inquiries have come to this Section in regard to the various opportunities, aside from institutional, open to dietitians. The following program was arranged to answer some of the questions: (1) "An Experiment in Settlement Teaching," Miss Alice McCollister, chairman, Dietitians' Section,

State Hospital, Norristown, Pa.; (2) "Acting as Health Advisor for the School Child," Miss Ova C. Pendleton, health advisor, White Williams Foundation; (3) "Factor in Teaching the High School Pupil Home Economics," Miss Ada Z. Fish, director of Art and Home Economics, William Penn High School; (4) "How the Dietitian of School Luncheons May Increase the Pupils' Efficiency," Miss Emma Smedley, director of School Luncheons, Philadelphia, Pa.; (5) "A Nutrition Clinic for Children," Mrs. Gwendolyn S. Hubbard, social service dietitian, Children's Hospital of Philadelphia, Eighteenth and Bainbridge streets; (6) "Diet and Health," Miss Sylvia Bayard, consulting dietitian, Child Federation, Witherspoon Building; (7) "A Visiting Dietitian in a Municipal Court," Miss Mary Loftus, visiting dietitian, Municipal Court; (8) "The Need of the Visiting Dietitian," Miss Frost, instructor, Visiting Nurse Society.

The Dietitians' Section of the Home Economics Association of Philadelphia met at the Pennsylvania Hospital, Eighth and Spruce streets, Philadelphia, Thursday, January 29. A round-table discussion on Social Service Work was held.

The following announcement will be of interest to many, and we are glad to have it at this time, thus enabling any who are interested to make plans for taking this special course. It was offered last year and was so successful that the committee plans to repeat it this year, beginning in June: The 1920 course for practice in home-making adjustments will be under the direction of the Committee on Home Economics of the Charity Organization Society of the City of New York. Its aim is to bring students, teachers, and other workers in home economics into closer contact with home living conditions and with the methods by which various social agencies are endeavoring to raise home standards and prevent personal and family breakdown. Although the training is planned primarily for women with professional experience in home economics, it is also open to college juniors and seniors who are especially recommended by the head of their home economics departments. The size of the group is limited to thirty-five, and applications for membership must be received by May 1. The course begins Thursday, June 3, and ends Wednesday, June 30. The hours are nine to five, Monday to Friday of each week. One day a week will be used for round table discussions, for special lectures, and for visits to social agencies. Four days a week will be spent in field work carefully arranged to meet the needs of the individual pupil. This year special training can be provided at the Morningside Nutrition and Homemaking Center, which has just been established by the Home Economics Committee. There is also opportunity for nutrition work with hospital clinics and various health and social agencies, and for social case work training with family social work agencies. A fee of \$24 is to be charged for the training. This fee is payable in advance to the Charity Organization Society, or to colleges making special arrangements with the Society with reference to payment and credit recognition for the course when taken by their students. According to the arrangements already made with Teachers College, Columbia University, students can secure four points of graduate or undergraduate credit upon the satisfactory completion of the required work. Students desiring such credit will register for the course in advance at Teachers College and pay the \$24 fee to Teachers College rather than to the Charity Organization Society. There will be no additional university fee for students who have paid such a fee during the present college year, or who will

register at the 1920 Columbia Summer Session. For further information and application blanks, write to: Miss Emma A. Winslow, secretary, Committee on Home Economics, Charity Organization Society, 105 East Twenty-second street, New York City.

### SMALL HOSPITAL REMEDY FOR LACK OF COUNTRY DOCTORS

The establishment of small private hospitals in rural communities, in order to insure prompt and efficient medical service to the people scattered through such districts, is advocated by a writer in *The Pennsylvania Medical Journal* as a remedy for the disappearance of the country doctor. Many country physicians have been rendered inactive by advanced years, or broken health, and their places are not being taken by younger men of the profession.

The length of time spent in the medical school and hospital, and the amount of money required are causing the young doctor to look for a lucrative practice rather than the one found in a purely rural community. The small private hospital, with ten or twelve beds, its title-holding physician, and two or three nurses, could render prompt treatment to the sick and injured to a large rural district, who otherwise would suffer from lack of care.

### TO ERECT POLICEMEN'S HOSPITAL IN NEW YORK CITY

The raising of \$5,000,000 for the erection and endowment of a hospital for members of the New York City police force and their dependents is the object of a campaign recently begun. Five hundred of the most prominent men in the city have been requested to serve upon the committee to raise funds, and subscriptions are now being received.

The hospital will be well constructed and thoroughly equipped in every way. It will have a capacity of 300. Many eminent specialists will serve on its staff, and there will be an up-to-date clinic. A small convalescent hospital will be erected at the seashore a few miles distant from the main building. The plot, hospital, and equipment will cost approximately \$3,000,000 and \$2,000,000 will be used as a permanent endowment, the revenue from which will help to support the hospital. It is thought that the total annual expenditure will amount to about \$250,000, and such further revenue as may be necessary will be provided from the receipts of the annual Police Field Day games.

The hospital is intended to be used exclusively for the members of the Police Department and their families, without cost, but in case there should be room for the treatment of outside cases, its services will probably be extended to the public for the treatment of special cases. A pressing need for an institution of this kind exists, since neither the public nor private hospitals of New York provide moderate rates for the treatment of members of this department or their dependents, and it is manifestly important that policemen should have the best medical and surgical treatment when needed. Members of the police department live a peculiarly hazardous existence which exposes them to all kinds of weather and dangers such as no other employees of the city need to face. It is felt that the establishment of such a hospital will reduce the pension list and the sick list to a minimum, as well as serve to keep the members of the force in high state of physical efficiency. The treatment of dependents will relieve the men of home worries and duties.

## HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS

15 Fort Washington Avenue, New York City

### HOW THE HEALTH SERVICE OF OUR GOVERNMENT IS HELPING INDUSTRY

Considerable publicity of a general nature has been given to the work of the Division of Industrial Hygiene and Medicine of the former Working Conditions Service, the work of which is now being carried on in a more limited manner by the Public Health Service. Specific examples of what this work means to American industry are given in a little pamphlet issued by the National Conference of Social Work, entitled "What the Federal Government is Doing for Industrial Hygiene," by Bernard J. Newman, Sanitarian, U. S. Public Health Service (Reserve). The pamphlet describes the work in a general way and then goes on to say:

"Thus, one firm was found on investigation to be liberating in the air of the workrooms a large quantity of valuable graphite dust. To eliminate this hazard, a commercial firm installed an exhaust ventilation system which proved to be inefficient, with the result that health conditions continued to be bad, while the firm itself lost considerable quantities of valuable graphite daily. The office was appealed to for an engineering plan to remove the dust more satisfactorily. A Service officer conducted a series of experiments that resulted in a reduction of over ninety per cent of the waste, with a corresponding saving to the plant and the protection of the workers.

"Another plant engaged in abrasive manufacturing found its crushing process exceedingly dusty and the surfacing of the larger wheels likewise so dusty as to constitute a grave health menace. Here, also, the Service designed hoods for both the crushing and surfacing processes, thereby reducing in a marked degree the hazards involved.

"These are typical only of one type of constructive service rendered to industrial plants; other types related to occupational diseases. One such came from a plant where there had been an epidemic of furunculosis. Fifteen men in one department, constituting the entire force, had from seven to ten boils each covering their forearms. The plant was unable to account for the trouble, but suspected a grease which was used to cover metal bars handled by the workers. An intensive study showed that the grease itself had no effect, but the unhygienic practice of the men of washing in a barrel of paraffin oil and then wiping their hands on waste, also used in common, had communicated furuncles from the worker originally infected to all the other workers.

"In another instance, a plant sought assistance relative to two processes in their industry where the men claimed a health hazard was present. The plant officials did not believe such a hazard existed, but wished the Service to direct a study to make a definite determination. When

the survey was completed, the hazards were found to be so slight as to be unworthy of consideration, but in the plant thirty other defective conditions were noted that warranted correction. Of these other hazards the plant officials were seemingly unaware, though they welcomed the information.

"In one western city, a plant superintendent took exception to a recommendation made to hood a process where lead fumes were said to be escaping; the reason assigned for the recommendation being that some of the men were suffering from lead poisoning. This official felt the statement was a reflection on his management, as he aimed to keep his plant as free as possible from hazards. In confirmation of his contention, he submitted a letter from the plant physician contradicting the findings of the Service officers. The result was that physical examinations were made of one hundred employees. In thirty-one cases symptoms of lead poisoning were found. The recommendations were then accepted and a special letter written by the plant commending the work done.

"When it was suggested to a group of employers that the service was willing to undertake a study of cutting oils and compounds, twenty-six firms in one locality offered their plants for the necessary research, stating that such oils and compounds constituted a serious problem upon which they would welcome advice in order to eliminate exposure of their workers to furunculosis and folliculitis.

"From the foregoing it is readily seen that the variety of service called for is extensive. Perhaps its scope is better shown when it is noted that it extends beyond the walls of the plant into the community. Thus, several towns within industrial zones have been surveyed that the hazards arising from the improper disposal of sewage, from the use of a nonpotable water and the occupancy of insanitary dwellings might be noted and plans made for their correction. One construction camp sought and obtained from the Service plans and specifications for a waste incinerator so designed that it could be adapted to the needs of a camp of 200 workers or to one of 1,000 workers."

### RETRAINING FOR DISABLED NURSES

Retraining which is being granted to nurses and other women who took an active part in the winning of the war, and who were disabled while performing their duties is an outstanding feature of the recent report issued by the Federal Board for Vocational Education. Approximately 34 per cent are enrolled in trade and industrial groups; about 32 per cent qualified for business and commercial training; and more than 18 per cent are fitting themselves for agricultural pursuits with strong indications that this number will be doubled.

## VENEREAL DISEASES AND THE HOSPITAL

Conducted by ALEC N. THOMSON, M.D.

Director, Department of Medical Activities

The American Social Hygiene Association, 105 W. Fortieth St.,  
New York City

### A HISTORY METHOD FOR GONORRHEAL CASES

By HENRY A. FISHER, M.D., Assistant Surgeon, Genito-Urinary Department, Brooklyn Hospital Dispensary.

*So many requests are being received for detailed information about Hospital and Dispensary records, particularly with regard to the gonorrheal patient, that Dr. Fisher was asked to prepare a somewhat detailed account of the Brooklyn Hospital method. This starts the subject. Our readers are asked to comment and criticize. Please be as painstaking as was Dr. Fisher and send us sample forms with your proofs that you have something better.*

A concise, complete history is of the greatest value in the management of cases of acute or chronic gonorrhea. Facts of previous attacks, such as duration, treatment employed, kind and duration of complications, as well as any condition that affected or may have affected the urinary tract, are important in addition to the history of the condition present when the patient first presents himself. These should all be noted in some regular order so that they may always be readily and easily accessible.

For the past seven years the form in use at the Brooklyn Hospital Dispensary, Genito-Urinary Department has proved extremely satisfactory.

The system outlined always presents the history complete to date of last visit, based upon thorough knowledge of the patient's condition. The patient receives prompt treatment without guess work or questioning. Histories are always available; keeping patients under treatment until cured, or at least until rendered non-communicable, is greatly simplified. Information is easily obtainable for statistical or other studies of the clinic activities.

The simple rules for entering the data coupled with the wall charts devised by Dr. N. P. Rathbun for systematically taking histories make the information recorded understandable by any doctor under whose care the patient falls. The following instructions suggest the steps that are necessary:

"The usual information required in every case is provided for at the top of the history sheet.

"Enter only positive statements.

"Under 'Family and General History' enter all points ascertained; any serious diseases had by patient; if married and how long; wife's health (particularly gynecological); miscarriages or stillbirths; number and health of children.

"If no information obtainable enter the word 'negative.'

"Under 'Previous Venereal History' record previous attacks of gonorrhea with dates, duration of each, complications, treatment received; over how long a period of time; pronounced cured by physician or not, and after what tests.

"If previous penile sores, number, location, incubation, duration, treatment; followed by secondary luetic manifestations or not.

"If history indicates lues (without open lesions) do not refer to Syphilis Therapy Division until Wassermann test is made.

"If no history of venereal infection enter word 'denied.'

"Under 'Present History' record symptoms in order of appearance; incubation (if indefinite give all exposures that might have bearing) treatment received; complications (kind and duration), noting type of treatment; check source of infection."

The history having been recorded, the patient takes the notes to the doctor who makes the examination. Again a wall chart is followed, supplementary questions are asked, and additional positive notes entered. The needed facts are few in number and easily fitted to a form. The illustration (Fig. 1) needs no explanation. In no case is the entire examination column filled out on the first day, as all the tests called for would not be made on the first examination. However, the findings of the first examination of any part of the genital tract, no matter when made, are entered in this column with the date in the column to the left. For instance, if the case first presents itself as an acute attack of gonorrhea, the prostate and vesicles ordinarily would not be examined before the fourth to eighth week, and the endoscopic examination still later. The findings would be entered in this column, however, with the date of examination to the left. Thus the condition of the genital tract as found on first examination is seen at a glance at any time.

For re-visits, the facts to be noted are conveniently arranged in columns printed on the back of the sheet (Fig. 2). This form is 9¼x11 inches in size. In the "Remarks" column are noted any new symptoms or complications that may develop, results of subsequent examinations, smears, and general progress. By "columnar" arrangement, the history sheet automatically presents a "graph" of progress to the practiced eye of the physician accustomed to the use of this method of recording. When a patient is apparently ready for discharge, the facts called for in the extreme right-hand column on the lower half of the first page are ascertained. Only if these are normal, and no trace of infectivity is found, the patient is discharged as cured.

When the patient is discharged as cured, or in the event of his ceasing to attend, the Survey of Case is made, which is valuable for statistical purposes and as

a measure of the efficiency of the clinic in combating venereal disease. To aid in entering the facts required in a concise, clear manner, a list of Official Abbreviations has been adopted, which is as follows, with examples of the abbreviations in use:

A.M... morning  
B ..... bladder  
Bly ... bloody  
C ..... copious  
Cl .... clear  
Cly ... cloudy

L .... long  
Lt .... light  
M .... moisture, massage,  
          many  
-P ..... on pressure  
Par ... particles

"Where an abbreviation represents more than one word, the context of the history will prevent any mistake in interpretation.

"In addition to the above, abbreviations in common use are permissible.

"*Illustrations.*—A.M. D.—morning drop; A.M. M.—morning moisture; A.M. D. P.—morning drop on pressure; C. Dis.—copious discharge; C. D. P.—copious drop on pressure; M. P.—moisture on pressure; M. F. B.—massage on a full bladder; M. & I.—massage and irrigation; W. D. P.—watery drop on pressure; F. Sh.—few

THE BROOKLYN HOSPITAL DISPENSARY GENITO-URINARY DEPARTMENT		SERVICE OF DR. FIRST - SECOND DIVISION		CASE NO. ADMISSION DATE	
NAME		OCCUPATION		AGE	S. M. W. D.
ADDRESS		NATIVITY		IN U. S.	YRS. WHITE-BLACK
REFERRED BY D. OF H. DR.		SIGN	BOOK	PATIENT	OTHERWISE
FAMILY AND GENERAL HISTORY				SURVEY OF CASE	
				DIAGNOSIS	
				COMPLICATIONS	
				NO VISITS	
				UNDER OBSERVATION	
				CASE CLOSED	
				COND. ON ADM.	
				COND. AT CLOSE	
				AGE 1st VISIT	
				1st SON, INF.	
				2d SON, INF.	
				AGE 1st SYPHILIS	
				CHARACTER OF	
				CONTROL	
				TREATMENT	
				ETC.	
PREVIOUS VENEREAL HISTORY		PREVIOUS TREATMENT - PHYSICIAN		INSTITUTION	
				QUACK DRUGGIST SELF	
SOURCE OF INFECTION		PUBLIC		CLANDESTINE	
		FRIEND		MARRIED WOMAN	
		WIFE		OTHERWISE	
PRESENT HISTORY					

DATE		WHEN FIRST MADE	DATE		EXAMINATION	DATE		CONDITION ON DISCHARGE
		GENERAL APPEARANCE			BLADDER			PREPUCE
		PREPUCE			RESIDUAL URINE			GLANS
		GLANS			CYSTOSCOPE			MEATUS
		MEATUS			URINE BY CATHETER			MEAR
		MEAR			RIGHT KIDNEY			INGUINAL GLANDS
		INGUINAL GLANDS			URETER			SCROTUM
		SCROTUM			URINE			URINE 1
		URINE 1			PHTHALEIN			2
		2			LEFT KIDNEY			PROSTATE
		PROSTATE			URETER			VESICLES
		VESICLES			URINE			EXPRESSION SWEAT
		EXPRESSION SWEAT			PHTHALEIN			URETHRA BOUGIE
		URETHRA BOUGIE			SON. COMP. PIE TEST			ENDOSCOPE
		ENDOSCOPE			WASSERMAN			

ENTER FIRST VISIT ON BACK OF SHEET

Form 101-588-13

Fig. 1. The form which has been in use for seven years in the Genito-Urinary Department of the Brooklyn Hospital Dispensary for taking the histories in cases of acute and chronic gonorrhea.

D ..... drop  
Dis ... discharge  
F ..... few, full  
Ft .... faint  
Gon .. gonorrhea  
          cus  
H ..... hours  
I ..... irrigation

S .... short  
Sh .... shreds  
Sl .... slight  
W .... watery

- Use Roman numerals in  
stating number of attacks.

The course of the patient as he passes through the Brooklyn Hospital Urological Clinic is as follows:

On his first visit, his history is taken by the "New" Historian; the patient carries this history to the doctor assigned to Higher Treatment, who, after reading the history, makes the indicated examinations, recording the findings in the appropriate places, pre-

NAME				NUMBER		
DATE	DISCHARGE	TIME MEATUS	URINE 1	URINE 2	REMARKS	TREATMENT

Fig. 2. For re-visits the facts to be noted are conveniently arranged in columns on the reverse side of the form illustrated in Fig. 1.

HISTORY	
DISCHARGE	CHARACTER { WHITE YELLOW BLOODY
	PERIODICITY { CONSTANT MORNING ON PRESSURE AT STOOL
PAIN	LOCATION { BACK { LOIN SACRUM
	CHARACTER { GROIN BLADDER TESTICLE PERINEUM MEATUS
	RELATION TO URINATION { CONSTANT OR PAROXYSMAL DULL OR SHOOTING NO RELATION ACCOMPANYING INCREASED BY RELIEVED BY
FREQUENCY	DAY NIGHT BOTH INCONTINENCE
CHARACTER OF STREAM	DIFFICULT TO START SMALL TWISTED DRIBBLING INTERRUPTED
HAEMATURIA	AMOUNT { INTIMATELY MIXED WITH URINE CLOTS
	OCCURRENCE { AT BEGINNING OF URINATION AT END OF URINATION
	ACCOMPANYING { PAIN GRAVEL TISSUE
GENERAL SYMPTOMS	SEXUAL DISTURBANCES { IMPOTENCE PREMATURE EJACULATION NOCTURNAL EMISSIONS INVOLUNTARY EMISSIONS PRIAPISM
	NEUROSES VASOMOTOR DIS- TURBANCES LOSS OF WEIGHT FEVER

Fig. 3. History Chart.

scribes treatment, and directs the patient when to return. On the second and subsequent visits, the patient is seen by the Director of Division, interviewed, meatus and urine examined, and findings noted, and treatment prescribed. If a smear is desired, the patient is sent to the laboratory and the smear is taken there; if a prostatic examination is desired, he is referred to the physician assigned to that work; if an endoscopy is desired, he is referred to the physician assigned to the endoscopy and cystoscopy room; if an examination of the urethra with a *bougie à boule* is desired, he is referred to the doctor at the Higher Treatment station. Reports of these examinations are written by the immediate examiner, placed on a file and later incorporated with the history. When finally the patient is apparently ready to be discharged, a full examination is made (extending over several visits) to determine that he is free from infection and its results. All cases before being finally discharged are referred to the Chief of Division, who carefully checks all entries and decides whether further examination or treatment is advisable. If not, the patient is "Discharged as Cured" and the history closed.

As a further aid to conciseness, all of our histories and

URINE	
TWO GLASS TEST	CLEAR OR TURBID SHREDS { LONG, HEAVY SHORT COMMA LONG FILAMENTS
	The following applies more particularly to the second glass in those cases where both glasses are alike.
TURBIDITY	URATES—CLEAR ON HEATING PHOSPHATES—CLEAR ON ADDITION OF ACID CARBONATES—EFFERVESCE ON ADDITION OF ACID
	SEDIMENT { COARSE (ROPY MUCUS) FINELY GRANULAR- DIFFUSE
	SUPERNATANT FLUID (ON STANDING) { TURBID CLEAR
	MICROSCOPIC { INTIMATELY MIXED NOT INTIMATELY MIXED
	HAEMOGLOBINURIA
	MICROSCOPIC GRAVEL
REACTION	ACID OR ALKALINE
MICROSCOPE	PUS BLOOD EPITHELIA BACTERIA—TBC—STAINED SLIDES CRYSTALS
ROUTINE CHEMICAL CULTURE INOCULATION	

Fig. 4. Urine Chart.

clinical notes are typed. The history taken by the doctor, the notes made by the Director of Division, the smear reports, and the reports on the various examinations, are written on printed white sheets which are the same as the buff-colored history form. These scratch sheets are given to the clinic clerk, who types them in the proper places on the history sheet, which is never in the hands of the patient.

A closed history is removed from the active file and placed in a binder, ready for reference if the patient later applies for treatment or advice.

If a patient ceases to attend the clinic, without having notified the physicians of his inability to attend, a note is sent, urging him to return. Three notes are sent at seven-day intervals if the patient does not respond, and then the history is removed from the active file, closed as "left of own accord," and bound.

### TREATMENT AT SPECIAL HOSPITALS

Arrangements for sending certain classes of patients to specific hospitals with special facilities for treatment have been made by the office of the Surgeon General of the Army. The office has issued a list of nineteen classes of cases with the hospitals which will treat such cases. The classes of cases include amputations, chronic arthritis, blindness, deafness, epileptics, mental defectives, insane, maxillofacial, general medical cases, functional neuroses, drug addicts, inebriates, peripheral nerve injuries, and paralysees; speech defects (not neurotic), general surgical cases, pulmonary tuberculosis, wounds or injuries of the skull, brain, or spinal cord, and organic disease of the nervous system.

## MEETINGS, CONVENTIONS AND CONFERENCES

### AMERICAN CANNING INDUSTRY CELEBRATES CENTENARY

During the week January 26-30, there was held in Cleveland, Ohio, the Thirteenth Annual Convention of the National Cannery Association, in conjunction with the Cannery Machinery and Supplies Association, and the National Canned Foods and Dried Fruit Brokers Association. Nearly five thousand members of these associations were present. The general sessions and sectional meetings were in almost continuous session. Addresses were made by Presidents Gerber, Sindall, and Daily, by President-elect Sears, and by H. W. Phelps of the American Can Company. The keynote of all these addresses was the inspection and publicity campaign just about to be launched. During 1919 this inspection service was in operation for vegetables and fruits in Southern California, Illinois, Michigan, Wisconsin, Ohio, Indiana, Iowa, Minnesota, Nebraska, and New York, for sardines in California and Maine, and for salmon in Alaska and on the Pacific coast. Already it is planned to extend the service in 1920 to Utah, Colorado, New Jersey, Maryland and Delaware, with the prospect of soon encompassing the entire industry. For 1920 fifty million cases under inspection are assured. The centenary of the American canning industry was celebrated at this Cleveland meeting. One hundred years have passed since the first rather crude efforts of Ezra Daggett and Thomas Kensett in New York with salmon, lobsters, and oysters, and those of William Underwood and Charles Mitchell in Boston with damsons, quinces, cranberries, and currants.

#### Improved Canning Methods

The early canning methods were crude, rule-of-thumb processes, and while heating the product—what we now call sterilization—was the basis of the whole canning system then as now, it was poorly understood and the necessity of varying the temperature and the period of processing with the different products was either not appreciated or was to some degree neglected.

In its early history the canning of food was in a sense a side line with most canners, and the canneries were often makeshift, temporary affairs, which did not always comply with modern ideas of sanitation. The canner soon learned, however, the close connection between proper sanitation and the quality of the product he was packing, so that today this vast industry, representing an investment of over \$200,000,000, has developed to such a point that the consumer is assured, within the limits of human fallibility, of canned fruits, vegetables, meats, fish, and milk that are wholesome and nutritious, attractive to the eye and appetizing to the taste, and which in the non-growing seasons are almost a necessity to the careful

housewife who wishes to offer to her family a well-balanced, nourishing dietary.

The National Cannery Association is a nation-wide organization, founded in 1907, and consisting of about 1,100 producers of all sorts of hermetically sealed canned foods which have been sterilized by heat. The Association is almost unique in that it neither produces, buys nor sells, its only purpose being to assure, for the mutual benefit of the industry and the consuming public, the best canned food that scientific knowledge and human skill can produce.

In the effort of the canners to produce the best canned food in the world, the Association has established a laboratory in Washington, where Dr. Bigelow and his corps of workers are constantly occupied in studying the various problems of the industry as they affect both the canner and the public, and as they have a bearing on the safeguarding of the American table. Every aspect of the canning industry is considered in this laboratory and every influence that might have any bearing on the healthfulness or wholesomeness of the product is subjected to careful and intelligent scientific investigation.

The humble tin can has been the subject of detailed study by this laboratory, until today over six billions of these cans are produced annually, and they offer to the packer the safest, most practicable and scientific food container that human skill and ingenuity have been able to devise.

It is not always appreciated that the canning of foods is one of our greatest conservation agencies. In the time of plenty, when foods are given us by Nature in an abundance too great for immediate consumption, the canner takes these foods at the time of their greatest excellence and by proper methods of processing and sterilization seals them hermetically in cans and makes them available for our use when fresh foods are only a memory, or, if on the market at all, are offered at such a high price that only the rich can buy them. The location of canning factories is not a hit-or-miss proposition. They are located where they are because experience has shown that those are the sections where the various vegetables or fruits of the best quality can be produced, and where it is possible to reduce to the smallest limit the interval between the gathering of the crop and its introduction into its hermetically sealed final abiding place.

Another progressive step is marked by the recent adoption by a considerable portion of the industry of a system of voluntary inspection. The canners have realized that a prejudice against canned foods still exists in the mind of many consumers. They believe that the prejudice against their product can be removed by their own efforts, and accordingly this system of inspection has been installed in most of the prominent packing states.

## FOREIGN CORRESPONDENCE

### GENERAL HOSPITALS IN GREAT BRITAIN

(From Our London Correspondent.)

London, Jan. 16, 1920.

In my last letter I drew attention to the state of affairs as regards the hospitals of Great Britain, and stated that something in the nature of a crisis had arisen with respect to their control and management.

During December there has appeared in the *Daily Chronicle*, a London journal of prominence, a series of articles in which was set forth the serious financial condition of the general hospitals throughout Great Britain. It was shown that some hospitals were overdrawn at the bank, others have had to sell securities and realize investments, while others have actually had to reduce the bed accommodation and close wards. However, this question was discussed in my last letter and it was pointed out that St. Bartholomew's Hospital, the richest and, on the whole, the most important hospital in Great Britain, was in somewhat dire straits and had to shut down its convalescent home in the country. The reason, or at any rate the main reason, for this perilous situation is usually said to be the strain imposed on the hospitals by the war, bringing about the falling off of subscriptions due to increased taxation and local rating, and the increased cost of commodities and of salaries and wages. Probably these are not by any means all the causes. Sir Napier Burnett, writing in the *Edinburgh Medical Journal* for December last, regards these explanations, although important, as only part of the truth, for the financial strain on many hospitals did not originate with the war. There has been for many years a steady change going on in the class of patients applying for hospital treatment. Originally restricted to a lower stratum of society, "the sick and lame poor," the hospital subscription list was usually adequate to meet the annual expenditure; but now many hospitals draw their patients from a much broader basis of the community, without having secured a proportionate increase in the number of subscribers. And, further, apart altogether from the increased cost of everything in consequence of the war, the elaboration into departments of the whole system of medical treatment and operative surgery has been increasing the expenditure beyond the possibility of its being met by voluntary agencies. So far as paying wards, or the institution of hospitals arranged on a paying basis, are concerned, Burnett has this to say: "Very few of the hospitals reserve accommodations for paying patients." He might have said that scarcely any of them make such reservations, and then only on a limited scale. At the present time the extremes in the social scale are well catered to as regards hospital provision, but between the private hospital at

five guineas a week, and the free general hospital, there is practically no provision made for the great majority in each community, the so-called "middle class," those who cannot afford the expense of the private hospital and yet who neither require nor desire to be pauperized by accepting the public charity. These people are ready and willing to pay one, two, or even three guineas (\$5.25, \$10.50, or \$15.75) per week for a bed in the general hospital. There would naturally be no difference in the treatment supplied, but if a patient desired some extra accommodation or luxury, one has a little difficulty in understanding why such hospital provision should not be provided.

Burnett summarizes some of the suggestions for the solution of hospital problems as follows: (1) The co-ordination of all hospital beds within a defined area—such an area as is served by the main central hospital; these beds would be under the supervision and management of a hospital council whose office would be to act as a "clearing house" in all matters, financial and administrative, pertaining to hospitals. (2) A greatly increased provision of convalescent hospital accommodation. (3) The consideration of establishing "paying beds" or hospital provision for paying patients. (4) An investigation into the whole basis of hospital finance. (5) Establishment of "team" work in hospitals with payment of the medical staff. (6) A new appreciation of the out-patient department, both from the point of view of the patient and the medical student. (7) The establishment of a hospital association for the purpose of instituting a hospital survey of the region or area in which it is situated, with sub-committees to investigate such aspects as hospital accommodation and construction, hospital finance, staffing hospitals, nursing in hospitals, medical education and research, coordination of present organizations, cooperative buying, and other subjects.

The question of paying hospital staffs is another matter which will soon have to be considered. As Burnett says, no longer can the voluntary purist hold the field in the face of the principle now accepted of state payment for pensioners, including the payment of medical officers, and the state payment for venereal diseases and tuberculosis. Surely it is not illogical reasoning to argue from these standpoints the payment of a staff for dealing with, say, fractures, hernia, etc.

Team work has been neglected in the British hospitals. It has a great deal in its favor, and its value was conclusively proved during the war. In fact, while there is much to be urged in support of the proposal to pay the medical staff, much more may be urged in support of the proposal to have pay wards in hospitals.

While most signs seem to point to the view that the

voluntary hospital system in Great Britain is doomed, it is likely that their end is not only not in sight, but that the system may be prolonged indefinitely; that is, with certain improvements and modifications. Sir Henry Burdett, the proprietor of *The Hospital*, who is known and esteemed throughout the length and breadth of the land, and who was mainly instrumental in establishing the hospitals of the country, perhaps those of London in particular, on a good financial basis, holds the firm belief that the voluntary hospital system can be maintained permanently. He has propounded his views in his journal, and they are manifestly entitled to close consideration. The State is not in a position at the present time to take over the control of the hospitals, even if this plan were deemed desirable. The ministry of health is already overwhelmed with urgent and insistent work, and it is idle to think for a moment that the hospitals will occupy the attention of its councils, at least for some time to come. Therefore, Sir Henry Burdett, by expounding the financial difficulties which beset the hospitals and by suggesting solutions, has done and is doing very excellent service to the community. His aim and wish, and those of his colleagues, have been to create a feeling of enterprise and hope in the breast of every one concerned by setting forth the actual position to be dealt with, not omitting the material fact that at present less than one in ten of the population gives anything to the support of these institutions. It is of hopeful augury that on the twenty-third of January Viscount Sandhurst is to preside at probably the most important meeting of the members of the British Hospitals' Association which has been held since its foundation by Sir Henry Burdett in 1884. On this occasion, Sir Arthur Stanley, the head of the British Red Cross Organization, will sketch in detail a scheme to which reference has been made in some of the lay journals. At this meeting Sir Arthur Stanley will submit his proposals and suggest that the Red Cross is one source from which aid to the hospitals may be forthcoming. It may be said that the Red Cross has already given to hospitals throughout the country £1,300,000 (\$6,500,000) and £250,000 (\$1,250,000) to the hospitals of London out of the surplus funds raised during the war, and, as said before, is now paving the way to render still further assistance. After this meeting has taken place there will be a good deal to write concerning the future of the voluntary hospitals in Great Britain.

In the meantime, it may not be out of place to suggest that those who "stand pat" for a continuance of the voluntary system do not appear always to have fully grasped the significance of the changed conditions. As Sir Napier Burnett pointed out, these changed conditions are by no means wholly due to the results of the war. They existed before the war, and the war has merely greatly exaggerated and intensified them, brought them, in fact, into the bright limelight of publicity. It certainly is true that the voluntary system must stand for a time, it appears probable for a considerable time, but it must conform as far as is possible to changed conditions. When the system was inaugurated on comparatively modern lines, hospital accommodation was intended for only one section of the community, "free to the deserving poor." The deserving poor outside the lowest stratum of society are as often, if not more often, found among the so-called middle class than among the artisans and manual workers. Those, too, who are striving to perpetuate the voluntary system make little or no reference to the pay hospital or pay ward system, which, after all, seems the most rational way for a hospital to maintain itself. But the idea is beginning to germinate and develop in the

brains of many Britishers. In the supplement to *Hospital*, January 17, 1920, a correspondent ventilates his views thus: "Without disturbing in any way the relations which exist between the honorary visiting staffs and the hospitals, and following and extending a plan which has survived the test of experience, provision might be made for: (1) Free maintenance, nursing, and medical attendance at the discretion of the almoner. (2) A nominal charge for maintenance and nursing, and free medical attendance. (3) Full charge for maintenance and nursing and, if necessary, free medical attendance. (4) Charges to suit the means of patients and in accordance with the character of the accommodation, without medical attendance, in which case the wards or rooms would be free to the medical practice of the district. In the opinion of the writer, the modification of the existing system in the manner outlined would do much toward consolidating the efforts of the medical practitioner and the hospitals to combat disease, and would form the basis of an appeal to the public so strong that all financial difficulties would be swept away, and in time the hospitals might become largely self-supporting. All the advantages of individual effort would be retained and the disadvantages of a State department averted."

The director of the Cancer Research Laboratories of the Middlesex Hospital has given out recently a very important statement. He points out that during the war cancer research was stopped to a very considerable extent, owing to the fact that other problems of greater immediate importance were presented for solution, and no great achievement beyond steady work was possible at the Middlesex Hospital, or on the part of other institutions in Great Britain, such as the Imperial Cancer Research Fund and the cancer hospital at Fulham, while similar reasons prevented any great activity in France. Since the armistice, the greatest national need has been reconstruction and this is the case in regard to cancer research. Also it is a fact that in this connection the financial side of the question is vital. It has practically come to the pass at the Middlesex Hospital that they have not the money that is needed and have been obliged to work with a number of untrained assistants. A few days ago the director acknowledged the loan by the British Ministry of Munitions of five grammes of radium bromide, for experimental and therapeutic purposes. The feature of the acquisition is that, though the quantity is less than one-fifth of an ounce, it is the largest that has ever been available for use in bulk in the work of research. Its value at present market prices is close to £100,000 (\$500,000) and the loan is made subject to termination at ten days' notice if the government should, unhappily, need to make such a demand. The Ministry of Munitions had the radium on hand after Armistice Day because it was no longer required for the manufacture of gun-sights and other articles of which luminosity at night is an essential feature, and when Mr. Cecil Lyster, who has devoted his life to cancer research, was consulted, he at once suggested that if it were lent to the Middlesex Hospital in one parcel it would render possible developments hitherto hardly dreamed of by any investigator.

The late Sir William Osler, one of the most versatile of physicians, was perhaps more distinguished as a clinician than in any other branch of medicine. He was essentially a practical man and was intensely interested in hospitals and their work. In this particular he differed widely from the ordinary run of Regius Professor of Medicine of Oxford, and from no one more than his immediate predecessors, Sir Henry Acland and Sir Burdon Sanderson.

## BOOK REVIEWS AND CURRENT HOSPITAL LITERATURE

**ESSENTIALS OF SURGERY.** A Textbook of Surgery for Student and Graduate Nurses and for Those Interested in the Care of the Sick. By Archibald Leete MacDonald, M.D., the Johns Hopkins University; formerly in charge of the department of anatomy, University of North Dakota; lecturer on surgery, Nurses Training School, St. Luke's Hospital, Duluth, Minn.\*

The book covers the principles of surgery in an elementary way. The matter is presented simply. Only general statements are made concerning etiology, pathology, and the natural course of the disease. The treatment is briefly indicated. Demonstrations for class work are described at the end of every chapter. These demonstrations are very good and will prove helpful to the lecturer.

The book is not complete enough in detail for a study book for class work, but it is an excellent guide book for the teacher.

**THE NEWER METHODS OF BLOOD AND URINE CHEMISTRY.** By R. B. H. Gradwohl, M.D., director of the Gradwohl Laboratories, St. Louis; and A. J. Blaivas, assistant in the same.†

This handy manual, while designed especially for the laboratory worker, might well find a place in the library of any doctor who does his own laboratory work. While short and concise, it contains an extensive bibliography for those desiring further information on a given subject. Ordinarily but one test is given, *e.g.* Benedict's for glucosuria, Haines' and Fehling's being omitted. Most of the color tests are based on the Hellige Calorimeter, which the authors consider essential.

In the introduction the value of blood chemistry is set forth. Part I is devoted to the chemistry of the blood; Part II to the chemical and microscopical examination of urine; Part III sets forth at length the blood findings in certain conditions and their interpretation.

**MENTALLY DEFICIENT CHILDREN, Their Treatment and Training.** By G. E. Shuttleworth, B.A., M.D.; Fellow of Kings College, London; Honorable Consulting Physician, formerly medical superintendent, Royal Albert Institution, Lancaster, for the Feeble-Minded of the Northern Counties; and W. A. Potts, M.A., M.D., medical officer of the Birmingham Committee for the Care of the Mentally Deficient, etc.‡

The authors have succeeded in presenting a full discussion of mentally deficient children in a pocket size booklet of 284 pages. The pathology, symptomatology, and bibliography are up to the minute. The plates taken from the authors' own cases add a great deal to the completeness of the book.

Chapters two and three are a little too local, the material in these chapters consisting of reports of mental

deficiency acts and investigations in England, including many local names. Chapter one, however, shows that while the authors are inclined to lay most stress on work done in England, they have not forgotten to give credit to American and French institutions. Indeed, it is gratifying to read of the good work done by various American counties and states towards the improvement of the mental defect.

The booklet reads well and can be used not only by physicians, but also by nurses and school teachers.

**THE REALITIES OF MODERN SCIENCE.** An Introduction for the General Reader. By John Mills, Research Laboratories, Western Electric Company, Inc.; member, American Physical Society. Author of "Radio-Communication," etc.§

The development of physical science establishes the essential unity of all natural processes. School curricula which consider physics and chemistry so separate that they are studied in different years and from texts which carefully refrain from encroaching on each other's fields are perhaps to blame for the confusion that exists in the average conception of scientific relationships. All who feel the need of a better orientation in modern science will find this book by Mr. Mills of distinct service. It gives an interesting account of the historical development of the fundamental concepts of science and makes an easily comprehensible statement of quantitative relationships. It should appeal to the average well informed reader as well as to the physician.

The realities of modern science he states to be matter, indestructible and irreducible; and energy, exactly measurable and subject to transformation, but not to loss. In chapters on the motions and interactions of electrons, the continuity and correspondence of molecular states, electrolytic dissociation, molecular magnitude, and molecular energy, he discusses the electronic constitution of matter which today is commonly accepted. "Its development has been so rapid that few scientists besides those actively engaged in research have as yet adopted its terminology and the necessary point of view. In terms, however, of electrons and quanta, the scientific progress of the next few years will undoubtedly be expressed."

### CURRENT HOSPITAL LITERATURE

**HOSPITAL MANAGEMENT.** A Handbook for Hospital Trustees, Superintendents, Training School Principals, Physicians, and All Who Are Actively Engaged in Promoting Hospital Work. By Charlotte A. Aikens, formerly superintendent of Columbia Hospital, Pittsburgh, and of the Iowa Methodist Hospital, Des Moines; late director of Sibley Memorial Hospital, Washington, D. C., etc.; illustrated. Philadelphia and London: W. B. Saunders Company, 1919, p. 488.

§The Macmillan Co., New York, 1919, \$2.50.

\* J. B. Lippincott Company, Philadelphia, 1919, \$2.

† C. V. Mosby Co., St. Louis, 1917, \$3.

‡ P. Blakiston Son & Co., Philadelphia, 1916, \$2.50.